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NEW SERIES.

No. I.

THE COTTON INDUSTRY

AN ESSAY IN AMERICAN ECONOMIC HISTORY

BY

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PART I.

THE COTTON CULTURE AND THE COTTON TRADE.

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THE COTTON CULTURE AND THE COTTON TRADE.

States Department of Agriculture, entitled "The Cotton Plant. Its History, Botany, Chemistry, Culture, Enemies and Uses." I regret that the late appearance of these works has prevented my making any further use of them than merely to cite them in occasional references in the foot notes.

M. B. HAMMOND.

University of Illinois,
Urbana.
1 December, 1897.

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BOOK I.

**THE COTTON CULTURE IN THE UNITED
STATES.**

CHAPTER I.

THE INTRODUCTION OF COTTON CULTURE INTO THE UNITED STATES.

Which was the land that first saw the cultivation of the cotton plant, or who were the people who first began to spin its snowy fibres into threads and weave these into cloth, will doubtless always remain among the problems which the human mind is unable to solve.

Long before the beginning of the Christian era, Herodotus, "the father of history," had written of an Indian plant "which instead of fruit, produces wool, of a finer and better quality than that of sheep,"¹ and subsequent writers from Nearchus to Pliny inform us that the culture of cotton was widespread among the people of India, Persia, Egypt, and China, and that cotton garments had long been held in high regard by the higher classes of these historic lands.²

But the knowledge and uses of this plant were not confined to the ancient peoples of the Eastern Hemisphere. The plant seems, indeed, to be indigenous to the tropical and semi-tropical regions of both continents. Columbus found the shrub growing wild in the islands of the West Indies, and on the South American mainland, where the natives had manufactured its fibres into garments and fishing nets.³ In Brazil the natives were

¹ Herodotus, Book III, Chap. 106, quoted by Baines, "History of the Cotton Manufacture of Great Britain," 17-18.

² Baines, *Op. Cit.*, 18-19; "Encyclopedia Britannica," Ninth Ed., VI, Art. "Cotton."

³ "Sommario dell' Indie Occidentali del S. Don Pietro Martire," in Ramusio's Collection, tom. II, 2, 4, 16, 50; reference in Baines, "History of the Cotton Manufacture," 34.

using the cotton lint for making beds when Magellan, in 1519, made his circumnavigation of the globe,¹ and Hernando Cortes, on his conquest of Mexico, found the manufacture of cotton goods by the inhabitants of this historic land already well advanced, as is evidenced by his sending to the Emperor Charles V "cotton mantles, some all white, others mixed with white and black, or red, green, yellow and blue; waistcoats, handkerchiefs, counterpanes, tapestries and carpets of cotton," in which "the colours of the cotton were extremely fine."² The first notice of the cotton plant in the part of North America which is now occupied by the United States, was in 1536, when De Vica found it growing in what is now the states of Louisiana and Texas.³

Its culture was begun very early by the English colonists in America. The first seeds seem to have been sown in 1607, the year of the arrival of the colonists in Virginia.⁴

Only two years after the settlement of Jamestown, a pamphlet entitled "Nova Britannica: Offering most Excellent Fruits of Planting in Virginia," stated that cotton would grow as well in that province as in Italy.⁵ Whether the experiment of growing cotton had actually been made is uncertain, but in a later pamphlet entitled,

¹ Vicentio's "Viaggio atorno il Mondo," in Ramusio's Collection, tom. I: 353; reference in Baines, 35.

² Clavigero, "History of Mexico," Book VII, Secs. 57, 66; quoted by Baines, 34.

³ Ellison, "A Centennial Sketch of the Cotton Trade of the United States," published in Latham, Alexander & Co.'s Annual Report on Cotton Movement and Fluctuations, 1892, p. 23.

⁴ "Description of the New Discovered Country," British State Papers, Colonial, Vol. I, 15, I; quoted by Bruce, "Economic History of Virginia in the Seventeenth Century," I: 194.

⁵ Handy, "History and General Statistics of Cotton," in "The Cotton Plant," U. S. Dept. Agric., Office of Experiment Stations, Bulletin No. 33, p. 30.

"A Declaration of the State of Virginia," published in 1620, it is stated that cotton wool was to be had there in abundance, and the next year in a list of the marketable products we find "cotton wooll, 8*d.* per pound."¹ All along through the seventeenth century and early half of the eighteenth, we find mention by travelers and others of the cultivation of the cotton plant: in Virginia in 1649; in South Carolina in 1664,² 1682, 1702, 1731 and 1741;³ and in Georgia in 1735,⁴ 1738,⁵ and 1749. But not until the beginning of the eighteenth century was cotton regarded by most people in any other light than as a garden plant,⁶ although the growth in South Carolina in 1664 is said to have been for domestic use,⁴ and that cultivated by the Saltzburgers at New Ebenezer, Georgia, in 1738, was undoubtedly so intended.⁵ That the use of the domestic cotton for manufacture was, however, not yet a widespread practice in 1741, is shown by the statement of Daniel Coxe, in "A Description of the English Province of Carolana, by the Spaniards called Florida, and by the French, La Louisiane," (page 81), which he published this year, and which was made up of information collected by explorers sent out by the author's father, the "Proprietor of Carolana." "Cotton,"

¹ Bishop, "History of American Manufactures," (1866,) I: 30; Bancroft, "History of the United States," (1878,) I: 140; Donnell, "History of Cotton," 17, ff.

² Carroll, "Historical Collections of South Carolina;" reference in Harry Hammond's "Cotton Production in South Carolina," 14, Tenth Census of the U. S., Vol. VI.

³ Ellison, "A Centennial Sketch," etc., 23-24.

⁴ R. H. Loughbridge, "Cotton Production in Georgia," 53-4, Tenth Census of the U. S., vol. VI.

⁵ S. C. Jones, "The Dead Towns of Georgia," Collections of the Georgia Historical Society, IV: 24.

⁶ In North Carolina enough was raised in the very beginning of the eighteenth century to furnish one-fifth of the people with their clothing. Handy, *Loc. Cit.*, 32.

says our author, "grows wild in the Codd, and in great Plenty, may be manag'd and improv'd as in our Islands, and turn to as great Account, and in Time perhaps manufactured either in the Country or in Great Britain, which will render it a Commodity still more valuable."

By the beginning of the American Revolution the possibility of making cotton a profitable crop seems to have been appreciated in all the southern colonies. One South Carolina planter already had thirty acres of the green-seed or short staple variety under cultivation near Savannah, Georgia.¹ The first provincial congress in South Carolina, which met in January, 1775, recommended the inhabitants to raise cotton,² and this recommendation was endorsed by the assembly of Virginia, which in its plan for the encouragement of the arts and manufactures, adopted March 27, 1775, resolved "that all persons having proper land ought to cultivate and raise a quantity of flax, hemp and cotton sufficient not only for the use of his own family, but to spare to others on moderate terms."³

It seems at first thought a little strange that the residents of the southern colonies, knowing the adaptability of their soil and climate for the cotton plant, should have neglected its culture for so long a time, especially as cotton from the Barbadoes and Smyrna was being sent into the country to be spun and woven into the rough garments worn by all but the wealthy classes before the Revolution.⁴ The first cause for this neglect undoubtedly lay in the limited market which the American cotton grower was sure to find for

¹ W. B. Seabrook, "Memoir on the Origin, Cultivation and Uses of Cotton," 9.

² Ramsay, "History of South Carolina," I: 213.

³ Bishop, "History of American Manufactures," (1866), I: 354.

⁴ Bagnall, "The Textile Industries of the United States", I: 13.

his produce. Important as was the American domestic manufacture for supplying the home trade with articles of clothing, this domestic manufacture was discouraged and even forbidden to the colonists, and thus the prospect of an expanding home market was too faint to offer much encouragement to the cotton grower. In the closing years of the first half of the eighteenth century, the Swiss and German colonists in Georgia did raise some cotton which they manufactured into cloth and sold, but the report of their industry brought out from the trustees for establishing the colony, a letter to the president of the colony in Georgia, in which it was stated that "as to manufacturing the produce they [the colonists] raise, they must expect no encouragement from the trustees, for setting up manufactures which may interfere with those in England might occasion complaints here." The letter further advises the colonists to turn their attention to "the produce of silk, which they will receive immediate payment for."¹

In the face of such opposition the domestic manufacture of cotton goods did not make much headway until the Revolutionary War cut off the imports of European manufactures and compelled the colonists to supply themselves with clothing.²

As respects the foreign markets, the trade of the colonists with the Continent had been prohibited by the Navigation Acts of the seventeenth and eighteenth centuries, and although it went on in spite of the legal restrictions, the risk which it underwent and the stationary character of the cotton industry of the Continental countries offered little encouragement to American plan-

¹ This letter, dated London, July 7, 1749, is quoted in Loughbridge's "Cotton Production in Georgia," pp. 53-54, Tenth Census of the U. S., Vol. VI.

² Ellison, "A Centennial Sketch," etc., 27.

ters to produce cotton for these markets. In Great Britain the chances of finding a vigorous demand and an expanding market for raw cotton were but little better. The spinning and weaving of cotton had been carried on in Great Britain, it is true, since late in the sixteenth or early in the seventeenth century. But the domestic manufacturers were unable to produce the soft muslins and beautiful "painted calicoes" which since 1631 had been imported into England from India and were so popular with the "fine ladies," including even the Queen herself.¹ Although the demand for this class of goods formed the basis of the later development of the British cotton industry, all efforts to fabricate all-cotton goods in England previous to the introduction of machinery proved futile. Associated with the manufacture of flaxen goods, and dependent upon the scanty supplies of linen warp which the weaver was able to secure from Germany and Ireland, dependent as well upon the meagre production of yarn which a weaver after trudging for miles was able to collect from the operators of the one-thread spinning wheels, the cotton industry made slow progress and the probability of finding a growing market in Great Britain was therefore not great. The British government, in its worship of the woolen industry, had not yet learned to appreciate the spinners and weavers of cotton, and seems to have made no recommendations nor to have offered any encouragements which might have induced the colonists to increase the production of the white staple. Even the silk industry had received more attention at the hands of the mother country, and repeated attempts were made to induce the colonists to establish it.²

¹ De Foe's *Weekly Review*, Jan. 31, 1708; quoted by Baines, 79.

² Bishop, "History of American Manufactures," (1864), I: 27-8, 31, 356-64.

The second cause which retarded cotton cultivation in America, was the difficulty which the early cultivators found in cleaning the seed and other impurities from the fibre. The British manufacturers could not make use of the cotton until it was cleaned. As late as 1787, Samuel Maverick and an Indian named Jeffrey, sent as an experiment, 300 pounds of seed cotton to England, but received word from their consignees that it was not worth producing, as it could not be separated from the seed.¹ The simple roller gins which were in use in some localities previous to the Revolution were of little value, as the seeds of the short staple cotton, which alone was then cultivated, clung too tenaciously to the fibre to admit of being removed by such simple means. The work of cleaning the cotton was, therefore, done by hand, the whole family usually engaging in this tedious operation as its members sat around the evening fire. Bishop says that the amount which one person could clean in this way was about one pound per day,² and it is said to have been customary in 1790 in Williamsburg county, South Carolina, for the cotton growers to require field laborers to clean four pounds of lint cotton per week, in addition to their other work.³

While cotton cleaning might have been profitable for India and other countries of the East, where labor could be employed for a mere pittance, this slow process of removing the seeds from the lint could scarcely have proved remunerative for the highly paid American labor, even when cotton sold at from 1s. to 2s. per pound.

The third obstacle which lay in the way of an early

¹ Harry Hammond, "Cotton Production in South Carolina," 14. Tenth Census of the United States. Vol. VI.

² "History of American Manufactures," I: 352.

³ Harry Hammond, "Cotton Production in South Carolina," 14. Tenth Census of the United States, vol. VI. Seabrook, *Op. Cit.*, 11.

cultivation of cotton in the English colonies was the profits which accrued to the pre-revolutionary inhabitants from the cultivation of other crops. In Virginia the cultivation of tobacco was nearly as old as the colony itself, and despite the efforts of the mother country to divert the energies of the inhabitants to the raising of other commodities,¹ the tobacco trade was so lucrative that the culture of the plant almost monopolized the attention of the Virginians beyond what was necessary to produce the food for their own use. The average annual export of tobacco from all the colonies from 1699 to 1708 was 28,868,666 pounds, and from 1744 to 1766, 40,000,000 pounds; and three-fourths of the pre-revolutionary production of this staple was raised in Virginia.² "Previous to the American Revolution," says Pitkin, "it [tobacco] constituted in value between a quarter and one-third of all the exports of the American colonies, now the United States."³ It is an interesting fact, however, that the year in which cotton was probably for the first time cultivated in Virginia with reference to its use in domestic manufacture (1661) was one during which there had been an overproduction of tobacco, and the colonists were deprived of a market in consequence of the Navigation Act of Charles II, (1660).⁴ In North Carolina, the sparse population was for the most part engaged in forest or meadow pursuits, drawing pitch, tar and turpentine from the pine forests, or herding cattle and hogs.⁵ Where the land was cultivated,

¹ Bolles, "Industrial History of the United States," 7.

² *Ibid.*, 92.

³ Pitkin, "Statistical View of the United States," 109.

⁴ McHenry, "The Cotton Trade," 9.

⁵ Sartorius von Waltershausen, "Die Arbeitsverfassung der englischen Kolonien in Nord-Amerika," 24.

tobacco, as in Virginia, and rice, as in South Carolina, were the chief crops.

In South Carolina and Georgia the cultivation of rice and indigo engrossed the attention of the early inhabitants, who found the cultivation of both these commodities very profitable until the outbreak of the war with the mother country. One hundred thousand barrels of rice had been sent from South Carolina to England as early as 1724.¹ With a steady market for all these commodities, the colonists were not likely to be led into the cultivation of cotton, whose preparation for market required so much labor, and for which commodity there was so little demand.

But there was still a fourth hindrance to the cultivation of the fleecy staple in the North American possessions of Great Britain in the seventeenth and eighteenth centuries. Of the original thirteen states of the American Union, the only two which have become great cotton producing regions are South Carolina and Georgia. The latter was not settled until nearly the middle of the eighteenth century, and in both these colonies the population was almost entirely confined to the tidewater region, a strip of territory about eighty miles in width along the coast. By 1790 the population of the upper regions of South Carolina was about equal to that of the coast region, but almost all the inhabitants of the hill country had settled in that region since Braddock's defeat in 1755,² and most of them had not arrived until after the close of the Revolution. Although the tide-water region is the country that produces the famous sea island cotton, the most valuable of all cottons, this variety was not introduced into the United States until after the Revolu-

¹ Bolles, "Industrial History of the United States," 8.

² Mills, "Statistics of South Carolina," 177.

tion. The short staple cotton, the only kind cultivated in the United States previous to 1785, finds its cultivation chiefly carried on in the higher lands from which it gets its name, "upland cotton." The population of the back districts was too meagre to have produced any considerable quantity of this kind of cotton, even if its cultivation had proven profitable. It is for the above reasons that the cotton plant, although not unknown to the early settlers of the southern country, was but little esteemed by them during the colonial period of our history.

Undoubtedly the first stimulus given to cotton culture within what is now the United States, was furnished by the American Revolution. The cutting off of the supplies of clothing received from the mother country, coincident with the outbreak of hostilities, caused the colonists to endeavor to increase the manufacture of the homespun garments.¹ Perhaps only a small proportion of the clothing spun and woven by the revolutionary mothers and daughters was composed of cotton, but it was enough to stimulate the southern planters to experiment with the cultivation of the new staple. We have already noted the recommendation of the provincial assemblies of South Carolina and Virginia,² and although we have no proof that the recommendations of these assemblies were directly acted upon, they show that the importance of cotton culture was now being appreciated. By the end of the war we find numerous statements in the writings of the times which show that the cultivation of the staple had made considerable progress. Tench Coxe of Philadelphia, who has been called the "father of cotton culture in the

¹ Ellison, "A Centennial Sketch," etc., 27.

² Above, p. 6.

United States," said in 1785 that it was "his pleasing conviction that the United States in its extensive region south of Anne Arundel and Talbot (Maryland), would certainly become a great cotton producing country." In 1786 Madison said, in a conversation with Tench Coxe at the Annapolis convention,¹ that "there was no reason to doubt that the United States would one day become a great cotton producing country," and the same year Jefferson in a letter dated Paris, Aug. 15th, to M. de Warville, said, alluding to a reference made by the latter to the cotton manufacture in Massachusetts: "The four southernmost states make a great deal of cotton. Their poor are almost entirely clothed in it in winter and summer. In winter they wear shirts of it and outer clothing of cotton and wool mixed. In summer their shirts are linen, but the outer clothing cotton. The dress of the women is almost entirely of cotton manufactured by themselves, except the richer class, and even many of these wear a good deal of home spun cotton. It is as well manufactured as the calicoes of Europe. Those four states furnish a great deal of cotton to the states north of them, who cannot make as being too cold."²

But the war with the motherland had indirectly done more to foster the cultivation of cotton than merely stimulating the manufacture of cotton goods at home. It had broken down the connection between the parent country and her colonies, which had made the latter not only politically subordinate to the former, but likewise

¹ Seabrook, *Op. Cit.*, 11.

² Jefferson's Writings, edited by H. A. Washington, 1853, II: 12. See also opinions of Washington and Hamilton as to the probability of success in cotton raising. Quoted in Von Halle, "Baumwollproduktion und Pflanzungswirtschaft in den Nordamerikanischen Südstaaten," 20-21.

subject to the dictation of the motherland in the matter of what they should produce and where they should market it. The close of the war left the infant republic politically free and independent, and while its economic independence was not yet guaranteed, the results of the war rendered its achievement possible, and, indeed, compelled it. The southern colonies, in particular, had been dependent upon the British markets, not only for what they sold, but for what they purchased, and British merchants had even been to a large extent creditors of the southern planters. These colonies had also suffered most from the devastations of the war, for, in addition to the natural poverty of the South, it had never been free from the presence of the enemy, and guerilla warfare rendered almost impossible the raising of crops. Prosperous towns of Georgia, as Sunbury and Frederica, were at the close of the war entirely ruined. New Ebenezer with its flourishing silk industry had ceased to exist.¹ The rice cultivation which had been carried on by slave labor along the coasts of the Carolinas and Georgia, had greatly declined, owing to the fact that so many of the negroes had been killed or carried off during the war. The crop of 1783 was less than one-half the average annual production at the beginning of the struggle,² and although the growth from this time on increased until 1792, it did not again approximate the pre-revolutionary crops. Indigo, which before the war had been such a profitable crop, was so no longer, owing to the loss of a market. During the war the East Indies had made large shipments of this commodity to England, and as it could be produced there cheaper than in America, and Great Britain no longer had an interest in

¹ McMaster, "History of the People of the United States," II : 34.

² Ramsay, "History of South Carolina," II : 205.

buying from her revolted colonies, the loss of this staple became a permanent one.¹

Farther north the culture of tobacco was declining, although the reason therefor was in no way connected with the military struggle between the countries. The reason for the decline lay in the fact that its culture had been carried on by means of a constant succession of cropping from the same land without rotation, and without the application of manures. Under such a system of cultivation the tobacco lands were speedily becoming exhausted. Jefferson, writing in his "Notes on the State of Virginia,"² in 1781, said that the culture of tobacco "was fast declining at the commencement of this war," and that "it must continue to decline on the return of peace." Among the "valuable substitutes when the cultivation of tobacco shall be discontinued," there will be, he adds, "cotton in the eastern part of the state, and hemp and flax in the western."³ Although the production of tobacco did not show an immediate falling off for the total United States, the increase after the war came from the new lands of North Carolina and Kentucky, and especially of Georgia, where it became the staple crop for the few years following the Revolution.⁴

The immigrants from the North and from Europe that after the war began to pour into the upland regions of the southern states, were in want of a semi-tropical staple for cultivation, and turned their attention to the raising of wheat and Indian corn.⁵ But wheat raising, although in the main successful, had some difficulties to

¹ Ramsay, "History of South Carolina," II: 212. Von Halle, *Op. Cit.*, 32.

² First Edition, 1787, 278.

³ *Ibid.*, 281.

⁴ White, "Statistics of Georgia," 38.

⁵ Ramsay, "History of South Carolina," II: 217.

contend with, especially the rust, which made it less suited to this region than to the North. Flouring mills had been established, however, in the West, and the wheat culture seemed likely to succeed.

Of even more importance to the cotton grower than the agricultural changes which had taken place in America, were those which had taken place in Great Britain in the methods of marketing and consuming the raw cotton. The first of these was the rise of a commercial class which took upon itself the responsibility of supplying the spinners and weavers with the raw materials, and found for these artisans a market for their finished products. This revolution in methods of trading had been completed by about 1760.¹ Close on its heels came the great inventions in the textile industries. The spinning-jenny, the water-frame, the self-acting mule, and the power-loom, in connection with the establishment of the factory system, so increased the possibility of production that they made the producer of the raw material responsible for the next great step in the economic development of the civilized nations.

The agriculturists of the southern portion of the new republic took upon themselves this responsibility of supplying a material for use by the new machinery, and their success has been no less marvelous than is the work of the architects of the Industrial Revolution.

The first event of importance in connection with the development of cotton culture in the United States, was the introduction of the long-staple or sea-island cotton into the country in the year 1786. The credit for this meritorious piece of work has been claimed for no less

¹ Brentano, "Ueber die Ursachen der heutigen socialen Noth." Schulze-Gaevernitz, "Der Grossbetrieb: Ein wirtschaftlicher und socialer Fortschritt. Eine Studie auf dem Gebiete der Baumwollindustrie," 27. (Translated under the title: "The Cotton Trade in England and on the Continent." 1894).

than three persons, and as the claim of all these rests on good evidence, we can only conclude that more than one person is responsible for introducing this species of cotton.

At the close of the American Revolution, England offered as a home to the loyalists the Bahama Islands. Among those who availed themselves of this privilege was Mr. Frank Levett, a native of Smyrna, Turkey, who came to this country to introduce a colony of Greeks. Being dissatisfied with the Bahamas, he returned to the United States after his property had been freed from the sequestration, and settled on one of the sea islands, probably Sapelo, lying off the coast of Georgia. Hither came in 1786 from Mr. Patrick Walsh, a friend of his, whom he had met in the Bahamas, "three large sacks of cotton seed." The seed, which was of the long staple variety, was from the growth of plants cultivated in the Bahamas, where they had been propagated from seed brought from the island of Anguilla, lying in the Caribbean Sea, and long famous for its excellent cotton wool. Mr. Levett seems not to have appreciated the gift, for in 1789 we find him writing to the donor that "being in want of the sacks for gathering in my provisions, I shook their contents on the dung-hill, and it happening to be a very wet season, in the spring a multitude of plants covered the place; these I drew out and transplanted into two acres of ground, and was highly gratified to find an abundant crop."¹

¹ Letter of Mr. Patrick Walsh in the *American Farmer* for Dec. 31, 1830 (Vol. XI: 335). Claim of Mr. Levett disputed in a letter by Mr. Thos. Spalding in the *Georgian*, Jan. 31, 1831; reference in the *American Farmer*, XIII: 107. Seabrook (*Op. Cit.*, 15), says that the cotton seed sent by Walsh to Levett was of the "Pernambuco or kidney cotton," the cultivation of which was subsequently abandoned for the sea-island cotton.

The same year that Mr. Levett received the sea-island cotton seed, Gov. Tatnall, Col. Roger Kelsal and Mr. James Spalding, all natives of Georgia, received parcels of the seed from friends among the exiled loyalists living in the Bahamas. These gentlemen also planted the seed, and met with favorable results.¹ Mr. Levett sent the cotton which he raised to Simpson and Davison, in London. The cotton was not covered with cotton bagging, but was sent in rice casks. The firm advertised it, and some Glasgow manufacturers examined it and bought it for "something like 4s. 6d. per pound." These manufacturers soon after this came to London and inquired for more of the same kind. They said they had never seen any cotton so good, and promised to take all that Simpson and Davison could procure, and told them to inform their friends in America that there was no danger of overstocking the market.² By 1789 twenty persons were engaged in the cultivation of the sea-island cotton in Georgia.³ The sea-island cotton was first cultivated in South Carolina in 1788, but its cultivation did not meet with success until 1790, and it was not extensively raised in this state until 1799.⁴

The advantages which the sea island cotton possesses over the short staple or upland variety are found in the length and strength of its fibres and in its silky character, which render it capable of being spun into long silky threads. It is chiefly used in the manufacture of thread

¹ Letter of Mr. Thos. Spalding. to the *Savannah Georgian*, April, 1828, quoted by Adiel Sherwood in "Gazeteer of Georgia," 1829, 261-6.

² W. W. Parrott in the "Proceedings of the Massachusetts Historical Society," 1857, 222.

³ Uré, "History of the Cotton Manufacture," I : 120. Dana, "Cotton from Seed to Loom." 23.

⁴ Bishop, "History of American Manufactures," (1866), I : 355.

and lace, and in the weaving of the finer grades of cotton goods which are often put upon the market as being silk. It is more easily prepared for the market than other cottons, for its seeds cling less tenaciously to the fibre, and it is, therefore, satisfactorily cleaned by passing it through a simple roller gin. Valuable as is this variety of cotton, it soon attained what was for many years its maximum production. Until about 1840 it was cultivated exclusively on the sea islands and a narrow strip of the adjoining mainland running from about Charleston, South Carolina, to the mouth of the St. Johns river in Florida. All attempts to grow it at a considerable distance from the sea failed. Experiments made with a view of improving the quality of this cotton resulted so favorably that its price, which in 1790 varied from 10*d.* to two or three shillings per pound, in a few years became 90 cents to \$1.25 per pound, and in one instance sold for \$2 per pound.¹

In addition to the requisites of soil and climate, the sea island cotton requires a greater diligence and knowledge of methods of cultivation than does the short staple, so that even within the above geographical limits its culture did not become universal.²

The success of the coast planters now led the residents of the hill country to try cotton raising on their lands. All attempts to raise the sea island cotton on the uplands were futile, but the short staple now began to be cultivated in all directions. But this upland cotton, although doubtless related to, and in many respects similar to that grown previous to and during the Revolution, still differed in important particulars from the latter variety. The cotton cultivated as a garden plant and for domestic

¹ Bishop, *Op. Cit.*, I: 355.

² Baines, 296. Uré, I: 113.

uses by the colonists in the tide-water region of the country from New Jersey to Georgia, was of a short staple variety, but had "a clean black seed, with fur at the end."¹ The cotton whose culture had after the Revolution been introduced on the uplands, was also short stapled, but had green instead of black seeds. These were more difficult to detach from the wool in which they were buried, but the fibre was strong and the wool had a much whiter appearance than either the sea island or the black-seeded, short staple cotton. On this account the planters believed that if it could be cleaned it would prove superior to all other kinds as a marketable commodity.

The extension of cotton culture at this period was largely due to the zealous advocacy of Tench Coxe, then assistant secretary of the Treasury Department at Philadelphia, and one of the strongest supporters of Hamilton's plan of protection for American infant industries. It was largely due to his influence that Congress, in order to protect the southern cotton growers, was led to impose in 1789, a duty of three cents a pound on the cotton of foreign growth, which the domestic manufacturers were still importing from Brazil and the West Indies.² The southern agriculturists were thus among the first to receive the benefits of the protective system inaugurated by the first Congress in 1789.

The production of cotton by the United States at this time is estimated by a later Secretary of the Treasury to have been one million pounds—presumably lint cotton.³

¹ Seabrook, "Memoir on the Origin, Cultivation and Uses of Cotton," 15.

² Niles' Register, xxxii, 332. Bishop, "History of American Manufactures," (1866), I : 355.

³ Levi Woodbury, Report on the Production and Consumption of Cotton in the United States, Executive Document, First Session, 14th Congress, No. 140, 46; reference to other authorities, 42.

Although there is nothing to indicate that this estimate was anything more than a rough guess, it probably was not extravagant. The estimate for the following year, 1790, was one and one-half million pounds, and for 1791, two million pounds. Three-fourths of this crop are supposed to have come from South Carolina, and the remainder from Georgia.¹

Although the growing importance of cotton culture had been for some years appreciated by the southern statesmen, Jefferson and Madison, the northern statesman, Jay, had probably heard little concerning this infant southern industry. In the treaty of 1794 between Great Britain and the United States, which Jay as minister to the Court of St. James was instrumental in procuring, he allowed (Article XII) cotton to be included among the commodities which the ships of the United States were restrained from carrying "either from His Majesty's islands or from the United States to any part of the world except the United States."²

The Senate refused to ratify this article of the treaty, and it was suspended by agreement between the two countries.

Of the obstacles which lay in the way of a rapid expansion of cotton growing in America previous to the Revolution, all but one had now been removed. An expanding market at home and abroad invited the planter to send of the new staple a seemingly unlimited amount. The large profits which were reaped by the early cultivators of tobacco, rice and indigo had disappeared, and both the old planters and the recently arrived settlers of

¹ Levi Woodbury, report cited, 7.

² *Treaties and Conventions between the United States and Other Powers*, (1889), 386.

the back country were anxious to cultivate the new staple which promised to bring new fortunes to their long neglected land. But the difficulty of preparing the cotton for market was still to be met. Various attempts had already been made to solve this problem. In India and other Asiatic countries there had been in use for centuries a small hand mill called the *churka*, which consisted of two upright posts on which was mounted a pair of rollers having longitudinal grooves and revolving nearly in contact.¹ Between these rollers the cotton was passed, the seeds, being too large to pass through, fell on the opposite side from the lint. The cotton was then cleaned from dirt by means of a vibrating bow, which opened the knots and shook out the dust.² Both of these tools had been introduced into America and applied to the cleansing of our cotton, and from the use of the bow is to be found the explanation of the term "Bowed Cotton",³ still current on the markets. Modifications of the *churka* had also been attempted by M. Dubreuil of Louisiana in 1742,⁴ by Mr. Crebs of West Florida in 1772,⁵ by Kinsey Burden of South Carolina in 1778, by Mr. Bisset⁶ of Georgia in 1788, and by Dr. Joseph Eve then of the Bahamas, but later of Georgia, in 1790.⁷ This latter machine was designed to gin the short staple as well as the long staple. But although all of these gins met with more or less success in cleaning the sea-island cotton, from whose long straight staple the seeds were easily detached, none of them proved equal

¹ Baines, 66.

² *Ibid.*, 67.

³ *Ibid.*

⁴ Bishop, I: 351.

⁵ *Ibid.*, 352-3.

⁶ Called "Bissel" in "Handbook of South Carolina," 37.

⁷ Seabrook, *Op. Cit.*, 34. "Handbook of South Carolina," 38.

to the task of cleaning the "green seed" or "upland cotton," the seeds of which were buried in its short and wooly fibre. It was therefore the sea island cotton whose cultivation met with such rapid expansion between 1786 and 1792. The cotton crops and exports for which we have statistical estimates from 1789 to 1793¹ must have been almost entirely of the long staple variety. Regarding exports, Pitkin says: "Scarcely a single pound of upland cotton was exported prior to the invention of the saw gin."² And it was clearly appreciated at the South that some effectual mode of separating the seeds from the lint of the short staple cotton must be devised before there could be any considerable increase in the production of this staple on the uplands. Phineas Miller, Eli Whitney's partner, says that in 1792, "the culture of the green seed cotton had just commenced as a crop in the upper country, and two or three million of pounds of this article had been raised and picked in from the field, but for the want of a suitable gin, but a small part of it had been prepared for market."³ The project of inventing a machine for cleaning short staple cotton had for some time occupied the minds of the southern planters, and steps in that direction had already been taken. The state of Georgia had appointed a commission whose duty it was to endeavor to secure the invention and construction of such a machine.⁴ It is quite probable that a number of persons may have been working on the problem, and it is not impossible that machines which performed the work more or less success-

¹ Report of Levi Woodbury, Secretary of the Treasury, on Cotton Production, etc.

² Pitkin, "A Statistical View of the Commerce of the United States."

³ Letter from Miller to Paul Hamilton, Esq., Comptroller of the State of South Carolina. *American Historical Review*, Oct., 1897.

⁴ D. A. Tompkins, "Cotton and Its Uses," *Manufacturers' Record*, Nov. 1, 1895, Supplement.

fully may have been produced previous to 1793.¹ But the first complete solution to the problem of how to separate the seeds from the fibre of the green seed cotton was undoubtedly that furnished by Eli Whitney, in the spring of 1793.

Brentano,² Schulze-Gaevernitz,³ and Hobson,⁴ have all called attention to the fact that great inventions are seldom the work of scientific men who have obtained their results through long and patient study, but are for the most part the achievements of practical men engaged in an industry whose processes are aided and simplified by the discoveries which they make. The inventions are usually the results of numerous experiments of perhaps many persons, and the real inventor has only combined in his discovery the previous experiments and achievements of his own and others. "Nearly all the great textile inventors were practical men, most of them operatives immersed in the details of their craft, brought face to face continually with some definite difficulty to be overcome, some particular economy desirable to make."⁵ As an explanation for the majority of the inventions of mankind, this theory is doubtless adequate. The invention of the saw gin is, however, an exception to the rule, and is perhaps the best illustration of the old "heroic theory of invention" that can be found. It is true that Whitney was not a scientific man in the strict sense of that term. But his invention was not one of those chance discoveries, made by a laborer in the prosecution of his occupation, which Adam Smith⁶ has called attention to as being the secret of many inventions.

¹ The roller gin of Joseph Eve was an effort in this direction.

² "Ueber die Ursachen der heutigen socialen Noth," 7 ff.

³ "Der Grossbetrieb," 30.

⁴ "Evolution of Modern Capitalism," 58.

⁵ *Ibid.*

⁶ "Wealth of Nations," Book I, Chapter I.

The saw gin was the work of a man not engaged in any capacity in the industry for which his machine was intended, and who was not even familiar, except at second hand, with the then existent methods of cleaning cotton and their deficiencies. At the time he began work on his invention he confessed "that he had never seen either cotton or cotton seed in his life."¹

Whitney was rather an example of the close observation, quick perception and sudden application of an idea, which have made the term Yankee synonymous with inventive genius the world over. He was a Massachusetts boy, whose distaste for farming and aptitude for handling tools had led to his employment during the Revolutionary struggle in the business of nail making, then carried on by hand.² At the close of the war he determined to secure a liberal education, and after considerable difficulty he secured the necessary funds and entered Yale College. Here the mechanical powers of the country artisan were trained for higher tasks than the repairing of fiddles and the making of hat pins and walking canes. Completing his college course in 1792, Whitney journeyed southward, intending to teach a private school in South Carolina.³ On his way south he formed the acquaintance of Mrs. Greene, the widow of Major-General Nathaniel Greene, and was by her invited to spend a few days at her home, Mulberry Grove, near Savannah, Georgia. It was here that his attention was first called to the subject of cotton ginning, by hearing some gentlemen from the upper part of the state, where cotton culture was just beginning, discuss the need of a machine for cleaning the green seed or short staple cotton,

¹ Olmsted, "Memoir of Eli Whitney, Esq.," 14.

² *Ibid.*

³ Letter of Eli Whitney to his father, *American Historical Review*, October, 1897.

and thus making this variety of cotton valuable as a marketable commodity. While thinking over the matter, Whitney was urged by Phineas Miller, the agent of the executors of the estate of General Greene, to make an effort to invent a machine which should subserve the above purpose. He himself offered to be at the entire expense of the undertaking, and Whitney rather reluctantly began work. Within ten days he had "made a small, though imperfect model."¹ The cotton was to be fed through a wire grating or latticed breast work, to a cylinder studded with wire teeth or "annular saws." This cylinder being turned, the teeth on passing between the wires of the grating, would grasp the cotton and pull the lint through, while the seeds being too large to pass between the wires would fall down on the opposite side from the cylinder. But there remained one difficulty to be overcome. The cotton accumulated on the teeth of the cylinder and clogged it so that the teeth could not pass between the wires of the grating. Whitney was at a loss to know how to overcome this difficulty, when a chance suggestion from Mrs. Greene, offered more in jest than in earnest, revealed to him the method by which the obstacle might be removed. Being a witness to his fruitless efforts to disengage the cotton from the teeth of the cylinder, this lady picked up the hearth brush and laughingly remarked, "Why don't you use this?" Filled with a new idea, Whitney returned to his work and added to his machine another roller studded with stiff hog bristles and revolving contiguous to, but in an inverse direction, to the other cylinder. This sufficed to sweep away the particles of cotton as they were ginned, and the saw gin in all its essential features

¹ Letter from Whitney to Thomas Jefferson, Nov. 24, 1793. Quoted by Olmsted, "Memoir of Eli Whitney, Esq.," 17.

the same as those still in use, was an accomplished fact. The first gin large enough for practical use was completed in April, 1793. It was a small affair, having a cylinder only 26 inches in length and six inches in diameter, and was turned by hand. Nevertheless, with it a negro was able to clean fifty times as much as a man could do in the old fashioned way.¹

Being himself without means for engaging in the manufacture of gins, Mr. Whitney entered into a co-partnership with Phineas Miller, now the husband of Mrs. Greene, in May, 1793. Mr. Miller advanced the first funds required in their undertaking, and was to share equally in the returns from their enterprise.

Unfortunately for themselves, they selected an unhappy mode of conducting their business. Instead of confining their energies to the manufacture and sale of cotton gins, Miller and Whitney proposed to monopolize also the business of ginning. Cotton gins were constructed by them and set up at various points in the South. The cotton in the seed was either bought outright by them, or the planters were compelled to give one-third of the cotton in return for having it ginned. By 1796 Miller and Whitney had thirty gins in eight different places in the state of Georgia.² Some of these were run by water power, and others were turned by horses or oxen. But the opposition of the people to monopolies, led in this case by Gov. James Jackson of Georgia, who urged the legislature to either pay moderate compensation to the patentees, or to suppress the patent;³ the impossibility of supplying in the

¹ Letter of Whitney to Thomas Jefferson, Nov. 24, 1793, *Loc. Cit.*, 17.

² Olmsted, "Memoir of Eli Whitney, Esq.," 23.

³ A reply to the Governor's message, by Miller and Whitney, appears in the *Columbian Museum and Savannah Advertiser*, Dec. 23, 1800.

above way the demands of the people for cotton gins, and worse than all, the open infringement of their patent, made this part of the scheme of Miller and Whitney a complete failure. Before they could obtain a patent (March 14, 1794), and even within two months after the completion of the original gin, the history of the invention of the Hargreaves spinning jenny was repeated on this side of the Atlantic. Unable to restrain their curiosity and avarice, the populace broke into the little shop at Mulberry Grove at night and carried off the machine.¹ Surreptitious copies of the gin now appeared in various portions of Georgia and South Carolina, and competed so successfully with Miller and Whitney's patent gins that there was little left for the latter to do.²

In constructing the first gin Whitney had devised several methods of affixing the teeth to the cylinders. His original intention was to cut the teeth in sheet iron in the form of saws, but he was unable to find the sheet iron in Savannah. He therefore made the teeth for his first machine of wire. In the model gin which he deposited in the patent office the teeth were, however, made in the form of saws as originally proposed.³ Advised by his New England friends that the gins with the wire teeth left the cotton in better shape than did those with the saws, Whitney constructed his first gins intended for use in the South as he had the original one, with wire teeth. The saws being much easier to

¹ Olmsted, "Memoir of Eli Whitney, Esq.," 16.

² *Ibid.*, 27.

³ *Southern Agriculturist*, August, 1832. The sketch of Eli Whitney contained in this number of the *Agriculturist* was written by William Scarborough, Esq., who obtained his facts concerning the Whitney invention from Doctor Lemuel Kollock, the friend and family physician of Mr. Miller and family. A copy of this article is in the collection of Whitney manuscripts loaned to the author by Eli Whitney, of New Haven, Conn.

make and attach, however, the trespassers on his patent right equipped their gins with saws. The principle was the same and the results it seems should have been the same. But for some reason the saws proved more popular. The English manufacturers for a time refused to buy the cotton ginned by Whitney's machines.¹ The users of the saw gins seem from the first to have had better success in disposing of the cotton thus ginned than those who used the patent gins.² Whether or not this was due to any real superiority of the saws over the wire teeth it now seems impossible to determine. Whitney constantly denied it, and the New England manufacturers substantiated his assertion.³ After a year or so the English manufacturers also accepted the cotton cleaned by the patent gins.

But the infringers on the Whitney patent continued to lay great stress on the supposed improvement which they claimed they had made on the original machine by substituting saws for wire teeth. One of the trespassers, Hogden Holmes, of South Carolina, applied for and actually secured a patent on a gin equipped with these saws. This patent was soon set aside by the courts, but the trespasser continued to make and operate his gins, and occasioned Miller and Whitney endless trouble.⁴ A

¹ Ellison, "A Centennial Sketch," etc., 16.

² Letter of Miller to Whitney, Sept. 28, 1797, *American Historical Review*, October, 1897.

³ Recommendations of Whitney's gin and the cotton cleaned by it, from New England manufacturers, are found in the *Southern Sentinel and Gazette of the State* (Augusta, Ga.), Nov. 12, 1795, as well as in other southern newspapers.

⁴ Holmes' patent was issued May 12, 1796. The original parchment copy of the letters patent is in the library of the South Carolina Historical Society, Charleston. A copy of it has been furnished me by Mr. W. D. Aiken, of Princeton, N. J., a great grandson of Holmes. The Holmes patent was set aside by the courts in Nov., 1802 (see Miller's letter to Hamilton, *American Historical Review*, Oct., 1897),

defective patent law and the difficulty of securing impartial jurors for years prevented the patentees from securing a judgment against the trespassers in the Federal courts. Not until 1807 was a judgment handed down in favor of Whitney, now the only surviving member of the firm.¹ From Georgia, which has probably reaped greater returns from the use of the cotton gin than any other of the cotton states, nothing was ever received by Whitney for his invention. The South Carolina legislature in 1801 agreed to pay Miller and Whitney \$50,000 for the right to a free use of the gin in that state. The next session of the legislature, influenced by a belief that Holmes and not Whitney was the real inventor of the saw gin, repealed the law voting the appropriation to Miller and Whitney. Convinced of its mistake, the law was again made operative at the succeeding session, and the money paid.² North Carolina and Tennessee laid a tax on the cotton gins within their borders, the proceeds of which were to go to the patentees.³ About \$12,000, it is said, was raised in North Carolina in this way,⁴ but little or nothing was received from Tennessee, where the payment of the tax was suspended by action of the legislature.⁵ The funds received by the inventor from the states of North and South Carolina were entirely expended in contesting his patent rights in Georgia, and the entire returns from his invention no

and subsequently injunctions were issued against the use of his machine. See Fessenden, "Essay on Patents," (1810), Whitney vs. Fort, and Whitney vs. Carter, pp. 130, 134. A copy of the judge's decision in the latter case has been furnished me by Mr. Philip P. Wells, Librarian of the Yale University Law Library.

¹ Olmsted, "Memoir of Eli Whitney, Esq.," 39-41.

² *Ibid.*, 30-34.

³ *Ibid.*, 31.

⁴ Letter of Mr. D. A. Tompkins, of Charlotte, N. C., to the writer, Dec. 12, 1895.

⁵ Olmsted, "Memoir of Eli Whitney, Esq.," 32.

more than sufficed to pay him for his outlay of time and money in the prosecution of his claims for justice.¹

But if the inventor failed to reap his reward from the invention, his countrymen, especially those in the South, did not fail to profit by it. The last obstacle to the cultivation of the green seed cotton having been removed, the culture of this species spread rapidly on the uplands. Hitherto the British manufacturers had complained of the dirty condition in which American cotton came upon the market, but after the invention of the saw gin American cotton steadily grew in favor. In 1793 the exports of cotton from the United States fell short of half a million pounds. Seven years later sixteen million pounds were sent to Great Britain alone, and only five years later over one-half of the cotton arriving in the latter country came from the United States.

The culture of this staple almost monopolized the attention of the South Carolina and Georgia planters. In the tide water region of these states, the culture of the sea-island cotton displaced that of indigo, and checked for some years the extension of the rice culture.² The population of the back country, which since the war had been meeting with success in the growing of the cereals, now abandoned them for cotton, and the recently erected grist mills were left standing idle.³ Indian corn, which in 1792 had been exported from South Carolina to the extent of nearly one hundred thousand bushels, soon had

¹ Olmsted, "Memoirs of Eli Whitney, Esq.," 70, note 3. For a full account of Whitney's invention, his efforts to protect his patent rights in the South, see the author's article, "Correspondence of Eli Whitney relative to the Invention of the Cotton Gin," in the *American Historical Review*, October, 1897.

² Ramsay, "History of South Carolina," II: 205.

³ *Ibid.*, 417.

to be imported for domestic use.¹ Tobacco, hemp, flax, barley and silk had all been articles of export from South Carolina and Georgia, but their cultivation was abandoned, and "King Cotton" reigned supreme. Ramsay wrote of it in 1808: "It has trebled the price of land suitable to its growth, and when the crop succeeds and the market is favorable, the annual income of those who plant it is double to what it was before the introduction of cotton."²

But aside from its effects upon the agricultural economy of the southern states, the introduction and spread of cotton culture exercised a profound influence upon the political and social life of the inhabitants. In South Carolina the political policy of the state had long been guided by the large rice planters along the coast whose commercial interests and residence in Charleston had led them to favor the Federal party, then in control of the national government. There was little intercourse between the old settlers along the coast and the purely agricultural people of the back country, and such as there was showed plainly that a feeling of hostility existed between the two sections. The western people were opposed to the Federalist policy and measures, but property qualifications and their own poverty prevented them from gaining the political control in the state. The spread of cotton culture in both the tide water region and the hill country turned the attention of the eastern residents to agriculture, and at the same time increased the wealth and number of the western population. Mutual interests developed, and fostered the growth of a strong state feeling, binding the two sections together in a united opposition to protective tariffs and in

¹ Ramsay, "History of South Carolina," II : 218.

² *Ibid.*, 214.

a common defense of their labor system. For in no way was the importance of the growing cotton industry shown in so striking a manner as in its influence on the maintenance and extension of slavery. Nothing else did so much to perpetuate this form of labor in the United States, and nothing else offered such strong arguments for its continuance. Cotton and slavery are the leading subjects in the economic history of the southern states during the succeeding sixty years, and to a study of their relation to each other we shall turn our attention in the following chapter.

CHAPTER II.

THE INFLUENCE OF COTTON IN THE PRESERVATION AND EXTENSION OF SLAVERY.¹

The close relationship which existed between slavery and the culture of cotton was a fact clearly appreciated at the South previous to 1860, but the nature of the connection was generally misunderstood. Southern statesmen and writers were fond of asserting that not only the culture of cotton and the prosperity of their own section were dependent upon slave labor, but that the entire cotton industry of both Europe and America, and the material welfare of a large proportion of the civilized inhabitants of both continents, were alike dependent on the continuance of slavery in the southern states.

The three decades which have elapsed since the close of the Civil War, during which time the growth of cotton has attained a magnitude unparalleled by any period antecedent to emancipation, have forever dispelled the idea that the existence of the cotton industry was in any way, except by force of circumstances, dependent upon the labor of the negro slave. But it still remains to be seen that the connection between slavery and cotton growing at the South was not merely an accidental phenomenon, and that while cotton was not necessarily

¹ Since this chapter was written, two works have appeared in which the relation between cotton and slavery has been considered at some length : W. E. B. DuBois, "The Suppression of the African Slave Trade to the United States of America, 1638-1870," *Harvard Historical Monographs*, No. I, (1896), and Ernst von Halle, "Baumwollproduktion und Pflanzungswirtschaft in den Nordamerikanischen Südstaaten," *Erster Teil*, "Die Sklavenzeit," *Schmoller's Staats- und socialwissenschaftliche Forschungen*, Band XV, Heft I. (1897).

dependent upon slave labor, its culture furnished slavery the leading role in the great historical drama which culminated with the Civil War.

For the origin of slavery in the United States, it is true that cotton was in no degree responsible. Slave labor had been a prominent feature of the industrial life of the English North American colonies for a century and a half before it had occurred to anyone to employ negro labor in the cultivation of the cotton plant, or before it had even become apparent that cotton was to become one of the leading products of the southern states. To the colonial policy pursued by the great commercial nations, England and Holland, during the seventeenth and eighteenth centuries, must be referred the explanation of the introduction of the "peculiar institution" into the territory now covered by the United States. For the building up of prosperous agricultural colonies on the Western Hemisphere, which should furnish food and raw materials to the inhabitants of the mother country, and which should constitute a market for home manufactures, cheap labor seemed a necessity. The transporting of negroes from Africa to America thus served the double purpose of giving employment to the merchant shipping of the motherland and supplying the colonists with laborers for cultivating their fields.

In the northern colonies the climate and the social and industrial habits of the people made slave labor a thing lightly esteemed, and the importation of slaves met with some opposition in this region.¹ But in the

¹ Von Waltershausen, "Arbeitsverfassung der englischen Kolonien in Nord-Amerika," 103; Hill, "Colonial Tariffs," *Quarterly Journal of Economics*, VII: 91 ff.

Of the 58,500 negroes in the English colonies in 1714, only 12,150 were in the North, forming only 5.56 per cent. of the total population of this section. The 46,700 blacks in Virginia, Maryland, and the

South there were many circumstances, both in the nature of the environment and the character and habits of the people, which favored the employment of the negro slaves. The southern landowners were often the sons of the English landed gentry, more accustomed to entrust their estates to hired overseers, than themselves to till the soil. The land was usually taken up in the form of large holdings, thus permitting an organization and combination of labor on a large scale. The climate was favorable to the negroes, and the short and mild winters rendered outdoor labor possible during the entire year. It was in the South, also, that the servile white classes, known as "redemptioners," "indentured servants," or "servants sold for the custom," were most numerous, and the transition from white serfdom to negro slavery, was an easy one, and one that proved advantageous to the master. It cost less to maintain the negro than it did the white man, and the authority of the master was absolute in the case of the former, while this does not seem to have been the case with regard to the white servants, who frequently revolted.¹ There were also certain advantages for negro slavery to be found in the nature of the southern crops and their methods of cultivation. Tobacco, the staple of the uplands, particularly of Virginia, Maryland and North Carolina, was a plant whose culture was well adapted to slave labor, for the small number of acres which could be cultivated by a single person made possible the grouping of a large number of hands under the supervision of a single over-

Carolinas, on the other hand, comprised 56.93 per cent. of the total population of these colonies. By 1790 the negro population of the North was only 2.05 per cent. of the total population, while in the South the proportion of blacks had not materially altered from that of 1714.

¹ Tourmague, "*Histoire de l'Esclavage*," 315.

seer. The cultivation was of a comparatively simple order, and permitted the employment of an entire family, for the women and children could be employed in picking the worms off the plants, or in gathering the leaves, while the men performed the more difficult tasks.¹ On the low lands, along the coast of South Carolina and Georgia, indigo and rice were the leading crops cultivated during colonial and revolutionary days. The cultivation of both these staples required severe labor and in this semi-torrid region with its malaria-tainted atmosphere the white man could not perform the work.² The planters who owned the rice lands spent the year in Charleston, leaving the estates in the charge of overseers. Slavery had its strongest hold upon this region, and is more easily to be justified here than anywhere else in the country.³

But in spite of the undoubted advantages which southern agriculture possessed for slave labor, a study of the economic condition of the South at the close of the Revolution does not show us that the advantage was a reciprocal one. It is true that of the ravages of the war, the South had received more than its due share, owing to the almost continuous presence of the enemy and the incessant guerilla warfare which was being waged. Yet the tardiness with which this section recovered from the disasters of the war is in marked contrast to the rapid increase in the wealth and prosperity of the northern states, where manufactures were springing up, commerce was expanding and the change in the agricultural methods was completely altering the aspect

¹ Cairnes, "The Slave Power," 41.

² Von Halle, "Baumwollproduktion und Pflanzungswirtschaft in den Nordamerikanischen Südstaaten," Erster Teil, 31.

³ Rhodes, "History of the United States," I: 1 ff.

of the country.¹ A close examination shows that the active labor which was so largely responsible for this progress at the North, was lacking at the South. Immigrants from Europe were not attracted to its fertile lands, but preferred to go where, if the land was less fertile, their labor was more respected. Of the whites in the South, the large landed proprietors and their sons seldom engaged in manual labor,² although the exhausted fields, deserted towns, poor roads and inns, indebtedness of the land holding classes, and the general lack of prosperity witnessed by all travelers, ill accorded with the leisure, luxurious habits, and the pride and arrogance affected by the large planters. The lower classes of whites were even less likely to prove the foundation of an industrious yeomanry. With evil antecedents, and with labor in disgrace, they were but a thriftless class, never working except under stress of hunger, and spending their time in sleeping and in lounging around the taverns. The negro slave had no example of thrift and industry furnished him, and had no reason for profiting by such an example had one been furnished. He easily fell into wasteful habits of agriculture, doing as little as possible to save his back from the lash, happy in the sense of owning nothing and feeling no responsibility.

The effect of cultivating the land by means of slave labor had been rapidly to deteriorate the soil. This had been especially marked on the tobacco plantations of Virginia. The difficulty of teaching the slave new processes led to the cultivation of tobacco as a single crop,

¹ Hildreth, "Despotism in America," 127-8.

² "No man will labor for himself who can make another labor for him. This is so true that of the proprietors of slaves, a very small proportion, indeed, are ever seen to labor." Jefferson, "Notes on Virginia," p. 40.

and the abandonment of the fields when they ceased to be profitable for tobacco culture.¹ As any system of manuring then practiced demanded a rotation of crops in order to obtain the food supply for the cattle, this artificial process of restoring fertility was also excluded, and was not appreciated if it had been understood. Even Jefferson claimed that manuring was not necessary to good husbandry in Virginia, "because we can buy an acre of new land cheaper than we can manure an old one."²

Slavery had apparently taken deep root on the rice and indigo plantations of the Carolinas and Georgia. Charles Cotesworth Pinckney said in the Constitutional Convention, that so long as there remained one acre of swamp land uncleared in South Carolina, he would raise his voice against restricting the importation of negroes, for he was "thoroughly convinced [that] the nature of our climate, and the flat, swampy situation of our country, obliges us to cultivate our lands with negroes, and that without them South Carolina would soon be a desert waste."³ But even in this region there were circumstances which threatened to weaken slavery. Indigo, which in colonial days had been such a profitable crop, had by 1790 almost ceased to be cultivated. Rice, then grown on the higher coast lands was cultivated as a single crop, and when the fields became so overgrown with grass and weeds that their cultivation was difficult, they were abandoned and new lands were taken up.⁴

¹ See Washington's letter to Arthur Young, describing the methods of cultivating the soil in Virginia. Washington's Writings, edited by W. C. Ford, XI: 178; also X: 468; XII: 222-24, note; XIII: 328, 406. See also Jefferson's Writings, edited by H. A. Washington, IV: 3-5. Cf. Bruce, "Economic History of Virginia," *passim*.

² Jefferson's Writings, IV: 4.

³ Elliot's Debates (1876), IV: 263. Cf. Von Halle, *Op. Cit.*, 31.

⁴ DeBow, "Industrial Resources of the South and West," II: 398.

Doubtless the entire rice lands, would soon have been exhausted had it not been discovered early in the present century that rice could be more profitably grown on the swamp lands. By overflowing these lands at the proper season, a process easily performed, the weeds were killed and a rich mould deposited, which manured the land and thus prevented exhaustion.¹ But even allowing for the undoubted advantages which negro labor possessed for the cultivation of the land in this region, it is evident that the culture of indigo and rice could not have sufficed to spread slavery throughout the South. The migrating people from Pennsylvania who began to fill up the back regions of the Carolinas and Virginia at the close of the Revolution, showed no tendency to adopt slavery,² and they began raising the cereals, for whose cultivation slave labor was of little profit. Tobacco, the only slave product cultivated on the uplands, when cultivated as a single crop caused a too rapid impoverishment of the soil to admit of a lengthy maintenance of slavery by an extension of its culture. And the adoption of a system of mixed farming was impossible under slave labor, for the slave lacked the intelligence and the interest in his work which is necessary for learning new processes in an industry of a diversified character.

The disastrous effects of the cultivation of the soil by slave labor were not unappreciated by the intelligent planters of the colonial and revolutionary days. Many of the southern statesmen—and the southern statesmen were all large planters and the most progressive agriculturists of the South—saw the disadvantages to agricul-

¹ Mills, "Statistics of South Carolina," 386.

² In 1790 the upper portion of South Carolina had a white population of 87,500, and a slave population of only 17,500. The lower and middle regions of this state had a white population of 54,000, and a slave population of 90,000.

ture of the slave system, and looked hopefully forward to the early extinction of this species of labor.

Washington,¹ Jefferson,² Madison,³ George Mason, the Randolphs, Patrick Henry and Richard Henry Lee all opposed slavery in principle and favored its early extinction. Farther south the economic evils of slavery were less apparent, and the majority of the people, in the tide-water region at least, doubtless shared the opinion expressed by Charles Cotesworth Pinckney.⁴ Yet, even in the extreme South, slavery was not always considered a blessing. In the first congress a representative from Georgia said that there was not a man in the state who did not wish that there were no slaves. "They are a curse to the country."⁵ Later writers, including the warmest advocates of slavery, have acknowledged that the economic conditions of the South near the end of the last century threatened to put an end to this institution. McHenry, who certainly did not underestimate the advantages of slave labor, wrote as follows :⁶ "It is fortunate for the blacks as well as the whites, that the cotton business sprang up, for the sons of Africa do not flourish in a state of freedom, and without the cultivation of the leading staple of commerce there would not have been sufficient occupation for them. The planters would have preferred to manumit their slaves, which, in fact, was done, rather than be encumbered with idle and superfluous hands."

¹ Washington's Writings, edited by W. C. Ford, XIV : 196. See also his letter to LaFayette, and Mr. Ford's note on Washington's agricultural correspondence, XII : 222-224.

² Jefferson's Writings, edited by H. A. Washington, IX : 290. See also his letter to M. de Warville, II : 357.

³ Writings of James Madison, IV : 278.

⁴ Above, p. 39.

⁵ McMaster, "History of the People of the United States," II : 359

⁶ McHenry, "The Cotton Trade," 12.

The fact that slavery was a weakening institution is shown by the decline in the value of slaves. Outside the rice region, their holding was becoming unprofitable. In 1790 the best hands could be purchased for two hundred dollars a head.¹ The acquisition of Louisiana, and the consequent opening up of new lands, might have delayed emancipation for a while, but there is little reason to doubt that, outside the tide-water region of the Carolinas and Georgia, the economic disadvantages of slavery were becoming so apparent and a feeling that the maintenance of the institution was contrary to the ethical standards of the country was becoming so strong, that voluntary emancipation or legislative action on the part of the states would soon have eradicated this species of labor. On the coast lands where rice was profitably cultivated, slavery would perhaps have continued until the growing population in the western portions of the states gained the political control, or until action on the part of the people at large had suppressed it.

But the movement towards emancipation was checked by the discovery that cotton could be profitably cultivated throughout the whole southern country. The introduction of the sea-island variety furnished the planters of the coast region with a means of recuperating their broken fortunes, and the invention of the saw-gin made possible the extension of cotton culture to the uplands. "The spread of cotton culture into the interior of the South finally broke down the contrast between the 'tide-water' region and the rest of the State and based southern interests on slavery."² Side by side slavery and cotton pushed westward into the "back

¹ McHenry, "The Cotton Trade," 80.

² F. J. Turner, "The Significance of the Frontier in American History," Annual Report of American Historical Association, 1895, p. 220.

country" of the Carolinas, across the pine hills and prairies of Georgia and Alabama, took complete possession of the alluvial lands along the Mississippi and Red rivers, and by 1860 were laying claim to the great central region of Texas.

Before considering at length the expansion of slavery and cotton culture, let us note the conditions to a profitable use of slave labor, and see how cotton conformed to these conditions.

1. We may mention as a first requisite to the profitable employment of slave labor, simplicity of occupation. It is because of the limitations set by this condition that we find in all countries where negro slavery has met with success, that the industry of the people has been devoted to agriculture. The skill and dexterity which is necessary for carrying on manufacturing operations, and the intelligent self-interest demanded by mercantile and commercial pursuits, were lacking in the slave, for there was no hope of reward to stimulate his activities. The South was not lacking in opportunities for carrying on manufacturing and commercial pursuits. "Other conditions being the same, the manufacture of a raw material will always be carried on in the neighborhood where the material is produced."¹ The almost inexhaustible coal fields and deposits of iron ore, to say nothing of the raw cotton produced, gave the South splendid facilities for manufacturing; and her wide rivers with their gentle currents offered opportunities for trading far superior to other sections which soon outstripped this region in both manufactures and commerce. The South had originally taken the lead in developing manufactures. "Even as late as 1810, according to the United States census for

¹ Von Holst, "Constitutional History of the United States," I : 344, note.

that year, the manufactured products of Virginia, the Carolinas and Georgia, exceeded in variety and value those of all New England. While the production of cotton remained profitable, the growth of slavery stifled manufactures, and that interest steadily declined."¹ But even within agriculture itself there was a further limitation set to slavery. Slave labor could be employed in the cultivation of only one crop, or of crops whose methods of culture were almost identical. The negro could learn in a purely mechanical way how to plant, cultivate and harvest a crop of sugar cane, cotton or tobacco, but he could not, under slavery, acquire the knowledge and technique necessary for carrying on a diversified system of farming. The cultivation of cotton is perhaps no simpler than that of many other agricultural staples, but it is raised in a climate more congenial to the negro, and its culture is of such a nature that the entire family of the slave could be employed in performing many operations, such as thinning the rows or gathering the lint, whereas the labor of the women and children would be of little profit in the cultivation of many other staples. Very few tools and no machines were used in the cultivation of this plant. Previous to 1860 the planting was mainly done by hand; "chopping cotton" was done by means of a hoe; this same implement was largely used in the cultivation, and the harvesting of this staple has always been done without the use of either tools or machinery.

2. As the "one crop cultivation"² of the soil under

¹ D. A. Tompkins, "Cotton and Its Uses," *Manufacturers' Record*, XXVIII, Nov. 1, 1895, Supplement, p. 1.

² By the use of the term "one crop cultivation," I do not mean to imply that cotton was the only crop grown in the cotton belt. Large quantities of Indian corn were raised. But both of these staples were "summer crops," or "hoed crops," cultivated in a very similar man-

the slave system eventually results in a wearing out of the land, a second condition to the use of slave labor is the existence of new and fertile lands which can be brought under cultivation as the old fields become exhausted. There were two advantages which cotton possessed over the other slave crops, tobacco, sugar cane and rice, in meeting this condition to the expansion and perpetuation of slavery. The first advantage lay in the fact that the cultivation of these latter staples was limited to a comparatively small area, demanding certain conditions of soil and climate which prevented the extension of their culture over a wide extent of territory. Cotton, on the other hand, could be grown on almost all the tillable lands of the South, and even when limited to the most fertile of these lands, found a wide expanse open to it. Still it was the unavoidable limitations of these fertile lands that acted as the chief motive impelling the South to demand an extension of the national domain. The second advantage which cotton possessed over other crops grown in the South, was that in spite of the exhaustion of the soil which its cultivation as a single crop eventually brought about, it was of a less exhaustive nature than its competing staples, especially tobacco, the only other slave crop grown on the uplands. Especially when the cotton seed was returned to the soil for the purpose of fertilization, the cultivation of this staple might proceed for a considerable number of years before it resulted in a complete wearing out of the land.

3. Steadiness of employment is a third condition to the profitable use of slave labor. The slave represents

ner. A rotation of these crops was, therefore, of little advantage according to the rule laid down by the old "three-field" system of cultivation.

to his master not only labor but capital. The hired laborer in his idle moments is no burden to his employer, for he must furnish his own means of subsistence. Wages must of course cover the means of subsistence for the entire year, but this does not bind any particular employer to maintain the laborer for this entire period. The wage earner can enter some other occupation or hire his services to some other employer. But the slave owner was obliged to keep up the working powers of the negro during the entire year, and required therefore some employment which would allow him to make an almost steady use of his property. Now there are few agricultural staples whose cultivation requires so continuous an employment of labor for so long a time as does cotton. The culture of the plant spreads itself over three-fourths of the year, and there is little of this time when labor is not in some way being employed in its cultivation. And even the small portion of the year in which the slaves were not actually employed in the cotton fields, they were not idle, for the need of new cotton lands led to their employment during the mild winters of the cotton belt in clearing new fields.

4. A fourth condition to the employment of slaves is a cheap and easy means of subsistence. Slave labor is less efficient than free labor, and cannot be rewarded so highly. The warm climate of the cotton belt allowed the negro to live in comparative comfort with but little outlay on the part of his master for shelter and fuel. Corn and bacon formed the two leading items in the negro's bill of fare, and as corn cultivation was almost always associated with that of cotton, and supplied the wants of both the slave and the hog, food supply was a thing easily obtained. It has been estimated by some

agricultural writers in the cotton belt that fifteen dollars would cover the average cost of keeping a slave for an entire year.¹

5. Organization of labor on a large scale is a fifth condition to the use of slave labor. That the slave whose only impulse to labor is fear of punishment, requires supervision is evident at first glance. But as the labor of the superintendent or overseer must be free, and must be rewarded with comparatively high wages, it is obvious that, other things being equal, that production will be the cheapest which permits of the least superintendence. Four or five slaves working on a small farm require the same supervision that fifteen or twenty would on the large plantation. As a single laborer can cultivate successfully only from five to ten acres of cotton, while in Indian corn, for example, he can cultivate thirty or forty acres, it is obvious that laborers can be more compactly massed, and more of them brought under the eye of a single overseer in the cotton fields, than when they are employed in cultivating corn. The advantage of cotton is still greater in this respect, when compared with such crops as wheat, rye and the grasses. It is largely due to this condition that cotton came to be cultivated chiefly on the large plantations.²

The advantages which the cotton culture possessed for the employment of the negroes soon made themselves apparent to both the slave-holder and non-slaveholder of the South, and there began a rapid transference of the blacks from the cultivation of other crops to the cotton fields of South Carolina and Georgia. The farmers of the northern states were enabled to sell their

¹ De Bow, "Industrial Resources of the South and West," I : 150, 162.

² Von Holst, *Op. Cit.*, I : 342.

slaves, who had become an expensive burden to them, to the cotton planters of the South. Even then the demand for slaves did not cease, and the exhausted tobacco plantations of Virginia and Maryland were next called upon to give up their black cultivators to the snow-white fields of the cotton states.

Outside of the rice districts the slave population of the southernmost states had not been a large one when the invention of the cotton gin gave an impetus to cotton culture in these states. The upper and middle regions of South Carolina, where the cotton lands of this state are chiefly found, contained only about 28,000 slaves in 1790, and in the entire state of Georgia the number of slaves was but little larger than that of New York. Maryland and Virginia had nearly three-fifths of all the slaves then in the United States.

The first extension of cotton culture was to the hill country of South Carolina and Georgia. The cultivation of grains in this region ceased, and the fields were surrendered to "King Cotton." As late as 1821 these two states produced more than one-half the cotton grown in the country.¹ The slave population of the hill country was soon larger than the white population, although in 1790 the whites in this region had outnumbered the blacks four to one.

But after a quarter of a century of cotton culture in this region had passed, it became evident that the uplands were becoming exhausted. Agricultural writers and speakers besought the planters to change their methods of cultivation; to adopt a rotation of crops; to raise stock in order to secure manure for the worn fields, and especially to plant less cotton and to produce their own food, which of late years many planters had im-

¹ Woodbury, *Report on Cotton Production and Consumption*, 13.

ported from the North and West.¹ But the difficulty of using slave labor in a diversified system of farming, and the speculative element which plays so large a part in the culture of cotton, deterred the planters from making the desired changes in agriculture. The old planters continued to raise cotton on their best lands, and sent their sons with a part of the slaves to the more fertile lands of the West. The old lands which had been deserted by slave labor fell into the hands of the poor whites, who managed to secure a precarious living therefrom by means of small crops of corn, cotton and vegetables.

The extension of cotton culture next proceeded in the direction of the more northern states, North Carolina and Virginia, and considerable cotton was raised in these states during the early years of the present century. But the higher cost of raising cotton in the more northern latitudes, and the uncertainty of the plant reaching maturity before the arrival of the frosts, prevented the rapid growth of cotton culture in these states after 1830 which took place elsewhere, especially as the continual decline in the price of the staple only emphasized the disadvantages under which the planters of these states labored.

But on the pine lands of central and southwestern Georgia, in the river valleys of southern Tennessee, and in the fertile regions of central Alabama, both cotton and slavery spread with great rapidity. After his first experience on the uplands of South Carolina and Georgia, the cotton planter usually avoided the hill country and took his slaves to prairie soils and into the river valleys.

¹ See address of Whitemarsh B. Seabrook at the first anniversary meeting of the Agricultural Society of South Carolina, Dec. 6, 1827, *American Farmer*, X: 90-91.

The greater fertility and depth of soil of these lands rendered them more suitable for cotton growing,¹ and permitted a longer continuance of the "cropping," or "one-field" system of agriculture. The Piedmont region of north Georgia, the sand hill region of northern Alabama, and the oak lands in central Mississippi were left comparatively free from slavery, and but little cotton was grown there.

The effect which the acquisition of Louisiana would have upon the perpetuation and extension of slavery was not foreseen at the time of its purchase.² Although small crops of cotton had been grown in this territory previous to its acquisition by the United States, the advantages of the rich bottom lands along the Mississippi and Red rivers for cotton production were not appreciated until some years later. Cotton was supposed to have its home on the uplands. But about the beginning of the fourth decade of the present century the wonderful cotton growing qualities of the Mississippi country began to be understood, and an enormous migration to this region on the part of the slave holders and their property took place. Two hundred and fifty thousand slaves are said to have been brought into this region in the single year 1836,³ and the *Virginia Times* (Wheeling) estimates that Virginia alone had sent one hundred and twenty thousand slaves to the South during the same year, forty thousand of whom were sold by their owners.⁴ The alluvial lands along the Mississippi and Red rivers became the most fruitful cotton region of

¹ Cf. Milton Whitney, "Climatology and Soils," in "The Cotton Plant," 143.

² Von Halle, *Op. Cit.*, 185.

³ Quoted from the *Natchez (Miss.) Courier*, in "Slavery and the Internal Slave Trade," 13.

⁴ *Niles Register*, LI: 83.

the South, and slavery became more firmly imbedded there than anywhere else in the country.

The effect of the extension of cotton culture on the price of slaves, especially after the suppression of the slave trade, was, of course, to increase enormously the market value of this species of property. Data apparently do not exist for determining the comparative rate of increase of cotton production and the price of slaves. We have already had it stated that the best field hands at the end of the Revolution could be bought for two hundred dollars a head.¹ This sum Thomas Kettell estimates to have represented the average value of slaves in 1798, five years after the invention of the cotton gin; and by 1815 he considers the average price to have been about two hundred and fifty dollars.² In 1836, when the settlement of the Mississippi country was creating such a demand for slaves, the *Virginia Times* estimates the average value of the negroes exported from Virginia to have been six hundred dollars.³ Considering the fact that the majority of these slaves sent to the South would be "prime field hands," the estimate is probably not too large; for only four years later, De Bow, the superintendent of the sixth census and the leading statistician of the South, thought five hundred dollars not too large a sum at which to estimate the average value of the slaves, young and old, who were dependent on cotton culture.⁴ The annexation of Texas and the spread of cotton culture to its prairies of course resulted in an-

¹ Above, p. 42. Kapp's statement ("Geschichte der Sklaverei," 108), showing the average value of slaves in 1790 to be only \$15, is certainly wrong.

² Kettell, "Southern Wealth and Northern Profits," 130. Cf. Von Halle, *Op. Cit.*, 49.

³ "Slavery and the Internal Slave Trade," 12.

⁴ De Bow, "Industrial Resources of the South and West," I: 175.

other increase in the price of slaves. "They are now selling for five hundred, seven hundred and fifty, and one thousand dollars," wrote an English traveler in 1849.¹ And by 1860 Olmsted found in the Southwest that good field hands, suitable for cotton culture, possessed an average value of about fourteen hundred dollars, and sometimes sold as high as two thousand dollars.²

It was cotton and cotton alone which was responsible for this increase in the value of slave property. In spite of the use of slaves in the tobacco fields and on the rice and sugar plantations, the number of slaves employed in the cultivation of all other crops than cotton in 1850 was only slightly in excess of the number of slaves in the United States in 1790,³ before the culture of the white staple had attained any importance. The natural increase among the blacks was almost entirely consumed by the cotton plantations, and even then the demand of the cotton planters was not satisfied. "The great limitation to production [of cotton]," said DeBow, "is labor."⁴ For slave labor was considered at the South as the only kind which could be used in cultivating cotton. Everywhere in the slave region, in the border states as well as in the cotton belt, the value of the negro as a cotton cultivator, determined the price for which he would sell. "In estimating the market value of his labor, he was viewed for the time from the traders' point of view, or, as if the question were—What is he worth for cotton?"⁵

Slave dealers from the auction block called attention

¹ Sir Chas. Lyell, F.R.S., "A Second Visit to the United States of America," I: 207.

² Olmsted, "The Cotton Kingdom," II: 151-2.

³ *Compendium of Seventh Census*, 94.

⁴ De Bow, "Industrial Resources," I: 175.

⁵ Olmsted, "The Cotton Kingdom," I: 1.

to the physical adaptability of the slave that they might be selling, for cotton picking or cultivating ;¹ and strong, active, adult, male negroes came to be known in the cotton belt as "cotton niggers," the same as the biggest and strongest mules are to-day known in Louisiana as "sugar mules."

After the legal prohibition of the slave trade, in spite of the fact that the smuggling of slaves into the country was always considerable, the demand for slaves by the planters of the cotton belt was met principally by the importation of negroes from the border states, as well as by the natural increase of those already there. Virginia, Maryland, North Carolina, Kentucky, Tennessee, Missouri, Delaware and the District of Columbia were all slave exporting states as early as 1840,² and later South Carolina was added to this number when her exhausted fields had made an extension of cotton culture at home unprofitable. Virginia, Maryland, North Carolina and Kentucky were the chief sources of supply, and among these Virginia easily held first place. "We have made some efforts to obtain something like an accurate account of the number of negroes every year carried out of Virginia to the South and Southwest," writes Prof. Dew. "We have not been enabled to succeed completely ; but from all the information we can obtain, we have no hesitation in saying that upwards of six thousand are yearly exported to other states. Virginia is, in fact, a negro raising state for other states. She produces enough for her own supply, and six thousand for sale."³ This estimate, made early in the thirties, would

¹ Von Halle, *Op. Cit.*, 287.

² "Slavery and the Internal Slave Trade," 12. Cf. Von Halle, *Op. Cit.*, 186.

³ A review of the debate in the Virginia legislature, 1831-2, in "Pro-Slavery Argument" (1832), p. 399.

of course have been entirely too small for the later years of slavery when the settlement of the rich cotton lands in the Mississippi Valley and the annexation of Texas had created such a demand for negroes in those sections.¹

Strange to say, this demand made on the border states for slaves for the cotton fields, instead of destroying slavery in those states, only seemed to perpetuate it. It is doubtful if slavery was a weaker institution in those states in 1860 than it was in 1790, although even at the South, among the friends of slavery, there was a difference of opinion in regard to this point. The rapid exhaustion of the tobacco lands should have caused slavery to die out in Virginia and Maryland. But just as it was on the point of doing so, the cotton business sprang up and created such a demand for the slaves that the border states found great profit in raising negroes to supply this market. Henceforth slaves were seldom kept in these states for the sake of raising crops, but crops were often cultivated for the sake of raising slaves. "It is believed that nowhere in the farming portion of the United States," said Henry Clay in 1829, "would slave labor be generally employed, if the proprietor were not tempted to raise slaves by the high price of the southern markets, which keeps it up in his own."² The negroes in Virginia, Maryland and Kentucky were often kept at some light employment, perhaps earning enough to pay for their subsistence, until they had reached maturity, when they were sold to traders who took them south.

¹ The Anti-Slavery Society estimated in 1840 the number of slaves annually sent south from the more northern states, at 80,000 per annum, but this estimate was based on the few preceding years when the Mississippi country was being settled, and is undoubtedly too large for a general average. About 1860, the movement is said to have been about 60,000 annually. Von Halle, *Op. Cit.*, 282-3.

² "Slavery and the Internal Slave Trade," 17.

The horror which a slave had of being "sold south" arose from the fact that so much more labor was required of him in the cotton belt than in the border states, and was seldom due to a fear of more brutal treatment, for as a rule slaves were better treated in the cotton states than they were in the border states.¹

It was the profitable slave trade carried on between the border states and the cotton states which led the residents of the former to lend such hearty support to the cotton growers' demand for more territory. "Texas comprehends a large extent of territory," wrote a correspondent of the Anti-Slavery Society in 1840. "It possesses in the judgment of practical men an unrivalled soil for the growth of the very finest kinds of cotton. . . . By some [slave breeders] it has been estimated that the acquisition of Texas as a slave market would raise the price of their slaves fifty per cent. at least."²

It was the need of new lands for cotton growing which thus formed the basis of the demand for the widening of the national domain to the southwest, although this, the true cause, seldom appeared on the surface.³

To have urged in Congress or before the public that territorial expansion was necessary for increasing the cotton area would only have caused ridicule, for the number of acres devoted to cotton culture was always

¹ "Slavery showed at its worst where it was most seen by observers from the North—upon its edges." Wilson, "Division and Reunion," 125.

² "Slavery and the Internal Slave Trade," 248-50. Cf. Von Holst, *Op. Cit.*, II: 610-11.

³ The demands of the cotton growers for territorial expansion did not cease with the annexation of Texas. Efforts were also made to secure Cuba and Nicaragua. See Rhodes, "History of the United States from the Compromise of 1850," II: 38 ff; 242 ff, 351-54. Cf. Von Halle, *Op. Cit.*, 206-9.

insignificant as compared to the immense acreage on which the plant could be raised. As late as 1850 De Bow, the superintendent of the census, estimated that cotton was grown on only five million acres. But the exhaustive system of agriculture, which was inseparable from slave labor, made the cultivation of cotton on most of the lands unprofitable. When cotton had once left the uplands there was no thought of a return to them. After the early years of cotton culture, when the supply of this staple was not able to keep up with the demand, cotton prices, although subject to many fluctuations, tended to decline.¹ The cotton growers of the South therefore found themselves obliged to strive constantly to reduce the cost of production, while the chief item in this cost, labor, was steadily rising in value. Outside pressure was also being brought to bear upon them, for the efforts which the British manufacturers were making to relieve themselves from dependence upon one source of supply for their cotton² rendered the southern planters uneasy lest their most important market might be lost to them.³ The necessity, therefore, of raising cotton by

¹ See Appendix I, chart.

² Cf. Book II, Chap. X.

³ In spite of the bold assertions at the South that England was dependent on the slave labor of the southern states for the cotton for her mills, the efforts of the East India Co. to grow cotton in India were viewed with suspicion and disfavor in the United States. This company in 1840 sent Captain Bayles to the southern states to purchase cotton seed and ginning machinery, and to hire experienced planters from the states to go to India and to experiment there with cotton growing according to American ideas. When the object of this gentleman's visit became known at the South, "the violent opposition which he then had to encounter, compelled him to carry arms, and to labor under the constant fear of being forced to use them; and the virulent attacks of the press at Natchez, combined with a sense of the lawless state of the community, and the urgent representation of friends, compelled him to retreat the moment he had effected the object of his journey." Wheeler, "Cotton Cultivation, Madras vs. America," 27.

slave labor at a low cost of production, compelled them to seek out the fertile lands of the river valleys and the prairies. When these had been taken up, an extension of cotton cultivation could come only through the acquisition of new territory. To have recourse to less fertile soils would have necessitated the abandonment of slave labor, but to the planter slavery was a *sine qua non* of cotton cultivation.

There was another reason which powerfully influenced the cotton growers to seek the annexation of Texas. It was evident that the broad and fertile plains of this great country were destined to become the seat of an extensive cotton culture whether Texas became an integral part of the United States or not. But Texas as an independent state could import slaves from Africa or the West Indies at an expense much less than that which the planters of Louisiana or Mississippi must incur to secure them from Virginia or Maryland. The cotton planters of the southern states, therefore, saw a prospect of their industry being ruined by cheap labor in the cotton fields of Texas, and they labored earnestly to put this state where its inhabitants would be under the same restrictions as to the importation of slaves that they themselves were. The sugar planters of Louisiana were already suffering from such a competition in Cuba and were clamoring for a repeal of the prohibition on the importation of slaves. This prohibition, said they, "has no other effect than to cause the planter of Louisiana to pay to the Virginia slave-holder one thousand dollars for a negro which now in Cuba, and by and by in Texas, may be bought for half that money. . . . The more we examine and reflect on the policy the Texans are likely to pursue in the matter, openly or covertly, the more we are convinced that Texas should be an-

nexed to the Union, or else Congress should repeal the law prohibiting the importation of slaves from Africa. Otherwise, the culture of sugar and cotton in Louisiana will suffer greatly by the cheaper labor which the planters of Cuba can and will employ."¹

These economic motives for the extension of slave territory appealed more directly to the private interests of the southerners than did the political motive, the desire to preserve the equilibrium of power between the free and the slave states. And that the annexation of Texas would tend to preserve this equilibrium was by no means universally conceded at the South. Not only did hesitating politicians, like Clay, assert that the acquisition of Texas would not have any permanent influence on slavery,² but some of the most ardent pro-slavery men opposed annexation for the very reason that they saw in it a weakening of the political power of the slave states. The demand made in the border states for slaves by every extension of cotton culture was apparently straining to the utmost the slave producing powers of these states. Hence men like Waddy Thompson feared that the rise in the price of slaves which the annexation of Texas would bring, would completely withdraw from the border states their negroes, and give these states into the hands of the abolitionists.³

¹ *New Orleans Courier*, May 21, 1839; quoted in Jay, "Miscellaneous Writings," 298. Cf. Du Bois, "The Suppression of the African Slave Trade to the United States of America," 168 ff.

² *Niles Register*, LXVII: 439.

³ "I am firmly persuaded that it is the certain and inevitable tendency of the annexation of Texas to promote the abolition of slavery. More so, indeed, than that of any other measure that has heretofore been proposed. . . . Slave labor can be employed in Texas with at least twice the profit which it yields in the average of the slave states of the Union. Our slaves will then be carried to Texas by the force of a law as great and certain as that by which water finds

It is doubtful, indeed, if this would have been the result of slavery extension. The increased demand for slaves was met in the case of Texas not only by an advance in prices, but by the planters of the older cotton states, especially of the Carolinas, turning their attention from their former pursuits to slave breeding. There was also a positive increase in the number of slaves in Virginia and the border states between 1850 and 1860.¹

When we come to consider the number of slaves employed in the cotton fields, and the geographical distribution of slavery and cotton growing, we are met by the most forcible illustration of the close connection between these two institutions. We do not, it is true, have any accurate statistics of the number of slaves employed in the cultivation of any of the southern crops, but De Bow has left us some careful estimates of the number of slaves dependent upon the culture of cotton in 1840 and 1850. In 1840 the slave population of the United States was 2,487,455. The slaves in the cotton states numbered 1,699,705. Of these, De Bow estimated that 1,200,000 were dependent on cotton culture. "And of these we estimate," says he, "eight hundred thousand as workers, which is probably not excessive when we consider that the Southwest, the great cotton region, is newly settled and the number of children out of all proportion less than in regions peopled by a natural growth of population."² The immense influence which cotton

its level. The slaves will very soon disappear from Maryland, Virginia, North Carolina, Tennessee and Kentucky, and in a period very short for such an operation, those states will become non-slave-holding states." W. Thompson in *The Democratic Review*, Sept., 1844, p. 239, quoted by Von Holst, *Op. Cit.*, II : 681, note.

¹ For tables showing the relative increase of the white and colored elements of the population in the cotton states and the border states, see Von Halle, *Op. Cit.*, 128-155, especially 138-9.

² De Bow, "Industrial Resources," I : 175.

culture in this southwestern region exerted in drawing slaves thither between 1830 and 1840 has already been referred to. The increase of slaves during this decade in the new states and territories, (Alabama, Mississippi, Louisiana, Tennessee and Arkansas), was 86.30 per cent., while in the Atlantic coast states the increase in slave population was only 5.50 per cent. The increase in cotton production for the same period is estimated at 163 per cent. in the western, and 51 per cent. in the eastern states.¹

In 1850 De Bow estimated that of the 3,204,313 slaves then in the United States, 2,500,000 were directly employed in agriculture, including persons of both sexes and all ages. The distribution of these to the various crops he makes as follows : ²

Hemp	60,000, or	2.5 per cent.
Rice	125,000, "	5.0 "
Sugar	150,000, "	6.0 "
Tobacco	350,000, "	14.0 "
Cotton, etc.	1,815,000, ³ "	72.6 "

In 1860 the proportion of slaves in the ten cotton states was greater than in 1850, and although there was no estimate made by the Eighth Census of the number of slaves employed in the cultivation of the various crops, there is no reason for doubting that the proportion of slaves in the cotton states employed in the culture of

¹ "While the production in the Gulf States has doubled itself for the eighteen years, from 1824 to 1841 inclusive ; that of the Southern Atlantic States for the same period has remained nearly stationary. Actual average of the eighteen crops from 1824 to 1841 :

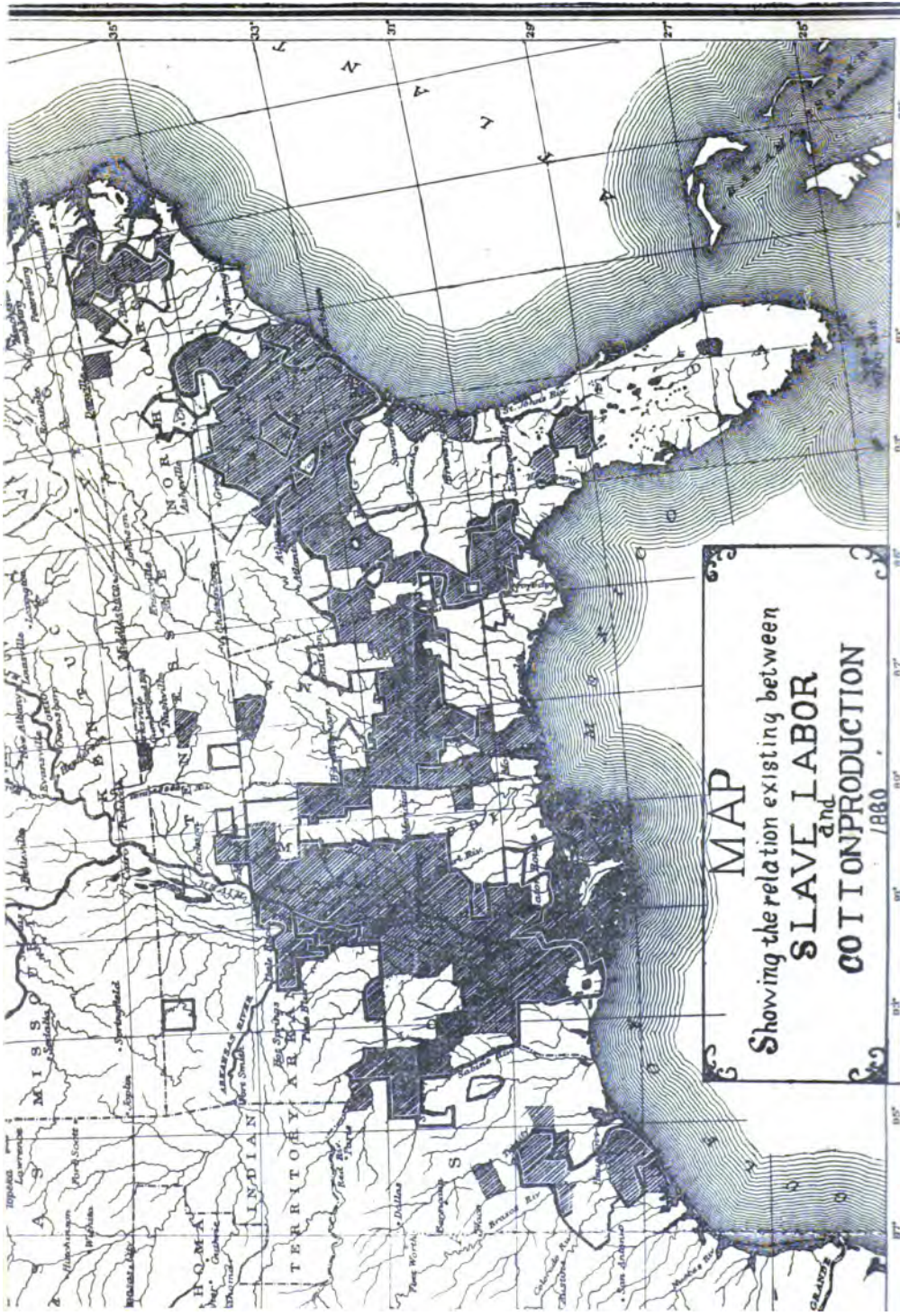
	1st 6 years.	2d 6 years.	3d 6 years.
Gulf States, - -	253,000 bales.	504,100 bales	1,030,000 bales.
Southern Atlantic States.	433,000 bales.	522,000 bales.	529,000 bales."

Seabrook, "Memoir on the Cotton Plant," 46.

² "Compendium of the Seventh Census, 94. Cf. Von Halle, 247-49.

³ Equal to 78 3 per cent. of the 2,332,675 slaves in the ten cotton states.





MAP
Showing the relation existing between
SLAVE LABOR
and
COTTON PRODUCTION
/ 1880

the fleecy staple was fully as large as in 1850. According to this reckoning we should have more than two and a quarter millions of slaves dependent principally on cotton culture for their enforced employment.

The geographical distribution of slaves and cotton culture shows even more strikingly than do the foregoing facts the connection which existed between these two institutions. In the accompanying map the diagonally lined surface represents those counties in the ten cotton states which had in 1860 a slave population as large or larger than the white population within the same area. The area included within the heavy black lines represents the same number of counties within each state as are included within the diagonally lined surface, these counties being the largest cotton producing counties in each state. The existence of large slave districts outside the cotton area is explained in the case of the Atlantic coast region by the rice culture, and in southern Louisiana by the cultivation of the sugar cane. In north-central Louisiana, where much cotton was raised, the slave population was slightly inferior in numbers to the whites, but from thirty-three to fifty per cent. of the population of each county in this section was slave. Elsewhere, it will be noticed, the two areas almost coincide.¹ Of the thirteen counties producing each over fifty thousand bales of cotton in 1859, there was only one which did not have from two to eight times as many slaves as it had white inhabitants.

¹ An interesting comparison can be made between this map and that on "Typical Soil Areas of the Cotton Belt," prepared by Major Harry Hammond, and published in "The Cotton Plant," 1896, p. 226. (The same map is in Von Halle, *Op. Cit.*, frontispiece.) The comparison shows that slavery and cotton culture had their strongholds on the alluvial lands of the Carolinas, Georgia, Louisiana and Texas, and along the Mississippi and Red rivers; on the pine hills of the Carolinas, Georgia, and Texas; on the black prairies of Alabama and Mississippi, and on the valley lands of Tennessee and Alabama.

In the early days of cotton growing it had been supposed that the cultivation of this staple would be carried on principally by white labor.¹ And as late as 1808, Ramsay, the historian of South Carolina, wrote: "In estimating the value of cotton, its capacity to excite industry among the lower classes of the people and to fill the country with an independent, industrious yeomanry, is of high importance."² But the need of a new commodity, in whose production the slaves could be employed, and the advantages which cotton thus afforded, soon drew the large slave holders to the cultivation of this plant, and thus a barrier was erected to the extension of white labor in the South. The inevitable tendency of cotton culture under slavery to seek out the most fertile lands in the South, kept these lands out of the hands of the non-slave holders, and rendered competition in cotton growing by white labor on the small farms almost impossible. In the Southwest, the great cotton producing country, De Bow says: "The non-slave holders possess generally but very small means, and the land which they possess is almost universally poor and so sterile that a scanty subsistence is all that can be derived from its cultivation, and the more fertile soil being in the hands of the slave holders, must ever remain out of the power of those who have none."³ To have worked as a hired laborer on the large plantation, cultivating cotton alongside of the negro slave, was too much of a social disgrace for the self-respecting white man in the South to undergo. To "work like a nigger," the southern way of expressing contempt for the

¹ See Richard Leake's letter to Tench Coxe, in Dana's "Cotton from Seed to Loom," 23.

² Ramsay, "History of South Carolina," I: 449.

³ De Bow, "Industrial Resources," II: 106.

white man who was obliged to earn his living in this way, proved a hindrance which not only prevented the "poor whites" in the South from rising in the scale of life, but repelled European emigrants from the southern shores. Of the foreign-born in the United States in 1850, 1,866,397 were in the non-slave holding states, and 378,205 were in the slave holding states. These constituted 13.89 per cent. and 3.91 per cent. of the aggregate population of their respective sections. Few of these aliens engaged in the culture of cotton, although where they did so, as in the case of the German settlers around New Braunfels, Texas, the result of the experiment showed that the success of cotton growing was in no way dependent upon the use of slave labor.

This belief in the necessity of slave labor for cotton growing had unfortunately taken deep hold upon the people of the South.¹ "It is impossible to destroy the one without destroying the other. The alliance between cotton and negroes, we will venture to say, is now the strongest power in the world," declared a writer in *De Bow's Review*.² The small number of whites engaged in the culture of cotton (the number is usually estimated at from one-tenth to one-sixth the number of slaves so employed) and the readily accepted theory that the climate of the cotton belt was unpropitious to white labor,³ lent color to this belief in the dependence of cotton upon slavery, and strengthened the southern mind in the belief in the justice of their cause and its final triumph in

¹ "The slave holders of the South, in their argument in favor of slavery, derived from cotton as a power in the world, assume that slavery is indispensable to cotton culture." Stirling, "Letters from the Slave States," 175. Von Halle, *Op. Cit.*, 201, 326-331.

² W. W. Wright, "Cotton and Negroes," *De Bow's Review*, N. S., IV: 139.

³ J. H. Van Evrie, M.D., "Negroes and Negro Slavery," 171.

the impending struggle. "You dare not make war upon cotton. No power on earth dare make war upon it. Cotton is king," declared ex-Governor Hammond of South Carolina in the United States Senate March 4, 1858.¹ And De Bow enjoined his people that: "To the slave holding states, it [cotton] is the great source of their power and their wealth, and the main security for their peculiar institutions. . . . Let us teach our children to hold the cotton plant in one hand and a sword in the other, ever ready to defend it as the source of commercial power abroad, and through that, of independence at home."²

The exaggerated importance which southerners attached to their great staple in the commerce and manufacture of the world, coupled with this belief that cotton could be successfully cultivated only by slave labor, led them to trust in the opposition of the New England cotton manufacturing districts to an attack on the slave states, and to expect armed interference on the part of Great Britain should war become inevitable.³ McHenry's work on "The Cotton Trade," published during the war and addressed to the English people, was written for the purpose of demonstrating this dependence of the English cotton industry on the slave power of the southern states. But neither in New England⁴ nor in Lancashire was this theory of the necessity of slavery accepted. The great Manchester statesmen, Richard Cobden and John Bright, who by securing the

¹ Olmsted, "The Cotton Kingdom," I : 7. Cf. Von Halle, *Op. Cit.*, 217, note 3.

² De Bow, "Industrial Resources," I : 178. Cf. *De Bow's Review*, XV : 9 ; XX : 489.

³ Von Halle, *Op. Cit.*, 331.

⁴ Cf. Edward Atkinson's Report in Boston Board of Trade Report for 1863.

repeal of the corn laws, had won the lasting friendship of the workingmen, were foremost in asserting that the forced dependence of Lancashire on slave labor was the most serious obstacle to the expansion of the cotton industry. "I maintain," said Mr. Bright in a speech at the London Tavern, June 16, 1863, "that with a supply of cotton mainly derived from the southern states, and raised by slave labor, two things are indisputable: First, that the supply must always be insufficient, and, second, that it must always be insecure. . . . I maintain—and I believe my opinion will be supported by all those men who are most conversant with American affairs—that with slavery abolished, with freedom firmly established in the South, you would find in ten years to come a rapid increase in the growth of cotton, and not only would its growth be rapid, but its permanent increase would be secured. . . . There is no greater enemy to Lancashire, to its capital and to its labor, than the man who wishes the cotton agriculture of the southern states to be continued under the condition of slave labour."¹

Political motives led many parliamentary leaders to look with no disfavor upon the prospect of a breaking up of the American union, but economic as well as philanthropic motives caused the British workingmen to lend their sympathy to the cause of human freedom. From no other quarter came a more earnest protest against measures intended to aid the slave power than from Lancashire, where two hundred thousand idle workingmen were forced to eat the bread of charity because Yankee gunboats had cut off from their mills the

¹ "Speeches of John Bright," edited by Thorold Rogers, 130-33. See also Cobden's letters in the *American Historical Review*, January, 1897.

slave-grown cotton of the southern states. Neither the operatives nor the mill owners were to be deluded by the sophistry of the slave holders.¹ When this had become apparent, and it had become evident that Great Britain would not interfere in the struggle in America, the cause of the South had become hopeless. "King Cotton" had failed in his last effort to bolster up the power of an institution which had long survived its period of usefulness.

¹ "Cotton is great, but conscience is greater, and in any question where these two powers may come in conflict the issue for the English mind will be nowise doubtful." Stirling, "Letters from the Slave States," 176.

CHAPTER III.

SOUTHERN AGRICULTURE, 1790-1860.

Important as were the changes in spinning and weaving cotton, brought about by the introduction of machinery and the establishment of the factory system, and great as was the influence of the saw-gin on the development of the cotton industry, these discoveries and appliances in the mechanical arts do not suffice in themselves to explain the remarkable expansion of this industry during the succeeding years. Back of the machine production, although greatly stimulated thereby, lay the demand for cotton goods originating in the fashionable tastes of the higher classes, but continuing in popularity when increased supplies of raw material and cheaper modes of production had brought these fashionable fabrics within the reach of the humbler members of society.¹ So, behind the invention of the saw-gin lay the forces which really determined the supply side of the question. These forces were the energy of the southern people, the suitability of their climate for cotton production, and most important of all, the wide area within the southern states on which cotton could be successfully grown. The failure of the saw-gin to come into general or even extensive use in India and the other cotton producing countries, shows that something more than its invention is necessary to explain the wonderful development of the American cotton culture and trade during the succeeding century. The invention of the saw-gin was only the unlocking of

¹ Cf. Book II, Chap. VIII.

the door of a great storehouse of cotton, so that all the world might draw from its seemingly unlimited stock the material for its clothing.

In 1793, when the invention of the saw-gin had removed the last obstacle to the spread of cotton culture throughout the South, the cultivation of this plant was still confined almost entirely to the tide-water region of the states of Virginia, Maryland, Georgia and the Carolinas. Even within this region its culture was by no means general. The greatest production came from the southern portion, especially from Georgia, where the sea-island or long staple variety had been introduced seven years before. But, although it excelled all other varieties as a marketable commodity, the sea-island cotton was subject to narrow geographical limitations, and all efforts to produce it at a distance from the sea coast proved futile. The upland planters, therefore, found themselves restricted to the cultivation of the green seed cotton, a short staple variety, but little known to southern planters previous to the Revolution. This variety of cotton seems to be the result of a crossing of the *Herbaceum* of eastern origin with the *Hirsutum*, probably of western origin. Experiments made with its cultivation had already shown it to have advantages over the black seed varieties as respects yield and method of cultivation, and Whitney's invention had at last removed the only hindrance which, since the Revolution, had prevented the planters from producing it as a marketable commodity. From Augusta as a center and chief market, the culture of the short staple cotton spread throughout the upland districts of Georgia and South Carolina. For more than a quarter of a century this continued to be the principal cotton producing region

of the country; as late as 1820 over one-half of the entire crop grown was raised in these two states alone.¹

The success of the cotton growers of Georgia and South Carolina now led the states to the north of them, Virginia and North Carolina, to attempt the production of this staple. Miller & Whitney sold their patent right to the saw-gin within the state of North Carolina to that state in December, 1802. At this time the culture of cotton had made but little progress within this state.² But although the production of the staple continued to increase in both North Carolina and Virginia, its culture made no such rapid progress as in the states to the south and west of them. There was comparatively little land suited to the production of cotton, and the climate was less propitious than it was farther south. The danger that the frosts would come before the plant reached maturity made cotton growing a hazardous undertaking, and when the price sank below ten or twelve cents a pound, the cotton crops of both these states showed an immediate falling off. By 1860 the cotton area of Virginia was confined to eight or ten counties lying in the south-eastern corner of the state. In North Carolina the principal seat of cotton growing was on the long leaf pine lands extending through the middle of the state from north to south.

Cotton culture seems to have begun in Tennessee almost coincident with the admission of that state into the Union. As early as July, 1797, Mr. Miller, of the firm of Miller & Whitney, proposed to his partner that they send an agent to Knoxville, "where we were informed that cotton was valuable," and to Nashville and the Cumberland settlements, to gather information concern-

¹ De Bow, "Industrial Resources," III : 25.

² Olmsted, "Memoir of Eli Whitney, Esq.," 31.

ing the culture of cotton in these parts and the mode of cleaning it.¹ On the return of the agent through the "back parts of Virginia," he was to look for an inland market for the consumption of cotton cleaned by the saw-gin.² By the beginning of the century the culture of cotton in Tennessee had attained such importance that public meetings of the citizens were called at various places to petition the Legislature to purchase of Miller & Whitney their patent right to the saw-gin within the limits of Tennessee. At one of these meetings held in Nashville, July 21, 1802, Gen. Andrew Jackson presided.³ In accordance with the desire of the petitioners, the legislature of Tennessee in 1803 purchased of Miller & Whitney the right to use the saw-gin within the state limits. Cotton production in this state, with the exception of a few years in the '40's, continued to increase at a uniform rate until the outbreak of the Civil War.

Although cotton had been cultivated in the great territory of Louisiana even before its purchase by the United States, little attention had been given to the western lands until after 1820. Cotton was still supposed to be the staple of the uplands. But in the decade ending with 1830, the superiority of the prairie lands and river bottoms for cotton growing began to be appreciated, and by 1830 the western country had outstripped the eastern states in cotton production. It was in the following decade, however, that cotton cultivation in the United States received its most rapid extension from the settlement of the western lands. The movement of slave holders and their property to central Alabama and to

¹ Letter of Phineas Miller to Eli Whitney, July 21, 1797. *American Historical Review*, October, 1897.

² *Ibid.*

³ *Aurora and General Advertiser* (Frankford, Penna.), Sept. 3, 1802, communication from Nashville, dated July 21.

the Mississippi river bottoms we have already mentioned. A perfect mania for cotton raising and for speculation in western lands had seized hold of the people during these years.

This speculative tendency was greatly fostered by the operations of the state banks, which were established in this region after the downfall of the United States Bank. The facility with which these banks granted loans gave an unnatural stimulus to the purchase of farming lands and to the extension of cotton growing. The new settlers in the western country took up large tracts of land, which, together with their negroes, they mortgaged to the new banks for loans with which to carry on their planting industry, and then turned over to the banks the cotton which they harvested.¹ Trusting in the high prices of cotton, the banks advanced funds far beyond what wisdom dictated, sometimes advancing as much as fifteen cents per pound.² In 1836-7 came a great collapse in prices, followed by a period of bank failures and of distress for the new planters who were unable to obtain further advances for continuing their agricultural operations.³ Within a period of three years fifty-five million dollars had been applied to the cultivation of lands in the new cotton states, and the production of cotton in these states had nearly doubled.⁴

The following tables⁵ show the progress of land sales and cotton culture in the Southwest, together with the capital applied to banking in the new states during the speculative period :⁶

¹ *Hunt's Merchants' Magazine*, XIII : 470-72.

² *Ibid.*

³ Von Halle, *Op. Cit.*, 160.

⁴ *Hunt's Merchants' Magazine*, XIII : 470-72.

⁵ *Ibid.*

⁶ *Ibid.* I have given the figures as published, although there is a slight discrepancy in the totals by years. Cf. the tables in Von Halle, *Op. Cit.*, 203-205.

Year.	Acres of U. S. Lands Sold in the New States.						Annual Cotton Crop—Bales.	
	Ala-bama.	Missis-sippi.	Louis-iana.	Arkan-sas.	Florida	Total.	New States.	Total U. S.
1833	451,319	1,221,494	89,441	41,859	11,970	1,816,083	559,210	1,070,428
1834	1,072,457	1,064,454	82,570	149,756	16,309	2,388,146	641,435	1,205,394
1835	1,587,002	2,931,181	325,955	630,027	48,304	5,522,474	760,923	1,254,328
1836	1,901,409	2,023,709	829,456	963,535	87,071	5,805,180	788,013	1,360,725
1837	381,773	256,354	230,932	281,916	108,839	1,259,814	916,960	1,422,930
1838	159,969	271,074	164,178	156,971	68,814	821,600	747,227	1,801,497
1839	121,935	17,787	500,307	154,858	56,499	851,586	911,913	1,366,932
1840	56,784	19,174	189,228	110,610	25,602	401,394	1,538,904	2,177,840
1841	59,705	21,635	95,111	54,860	6,388	228,699	1,231,334	1,634,945
1842	118,827	43,960	45,360	24,391	5,333	238,079	1,160,389	1,683,960
Total	5,902,180	7,880,828	2,554,138	2,568,783	435,129	19,333,055	9,256,308	14,978,979

CAPITAL APPLIED TO BANKING IN THE NEW STATES.

States.	State Loans.	Private Capital	Total.
Alabama, 1835-7	\$ 8,100,000	\$ 1,000,000	\$ 9,100,000
Mississippi, 1838	7,500,000	25,000,000	32,500,000
Louisiana, 1835-6	9,321,000	22,000,000	31,321,000
Arkansas, 1840	3,500,000	.....	3,500,000
Florida, 1833-9	3,900,000	.....	3,900,000
Total	\$32,321,000	\$48,000,000	\$80,321,000

It will be seen that from 1833 to 1840 nearly the entire increase in the cotton production of the United States came from the new states. After 1840 there was a falling off for some years, owing to the depression in the price of the staple, caused by over-production and the collapse of speculation. Cotton growing in the Mississippi Valley received a new impetus, however, after 1850, and by the outbreak of the Civil War over one-half the cotton grown in the United States was produced in the three states, Alabama, Mississippi and Louisiana.¹

The possibilities of Texas as a cotton growing region were fully appreciated even before that vast territory had become a part of the Union. The most notable in-

¹ Ellison, "A Centennial Sketch of the Cotton Trade of the United States," 19. Von Halle, *Op. Cit.*, 169, 204-5.

crease in cotton production between 1850 and 1860 came from this state, but the sparse population prevented it from surpassing the Mississippi country as a cotton producing region previous to the Civil War.

By 1850 all the territory through which the cotton belt now passes had been acquired by the United States, and the outline of the cotton belt, almost as it has since remained, was already to be traced. Some counties, especially in Texas and Arkansas which did not then produce cotton now do so, and in all of the states the acreage and production of many counties have greatly increased, and yet the boundaries of the cotton belt have been pushed comparatively little beyond what they were in 1850.¹

In the new states west of the Mississippi the cotton region lay entirely to the south of the isothermal line for mean summer temperature. East of the river it extended north of this line which passed through northern Alabama and Georgia and middle South Carolina. The area of chief production began in southeastern Virginia, and, usually avoiding the coast, passed through the central portions of the Carolinas, Georgia, Alabama and Mississippi; then widened to the northward and embraced northern Louisiana and southern Arkansas, and ended in the central portion of the great state of Texas.²

It will doubtless surprise many readers to learn that notwithstanding this vast area within which cotton was the leading staple cultivated, the actual acreage devoted to this crop at any time previous to the Civil War was very small. The crop of 1850-60, which was by far the

¹ Compare maps prepared by Edward Atkinson in Boston Board of Trade Report for 1863, and by Olmsted in "The Cotton Kingdom," with those in the volume on Agriculture, Eleventh Census of the U. S. See also Von Halle, *Op. Cit.*, 168.

² Boston Board of Trade Report for 1863, map.

largest that had ever been produced, being in excess of two billion pounds, was raised on an acreage less than that included within the boundaries of South Carolina, even when the most liberal estimate of the cotton acreage is accepted.¹

In 1836, when cotton cultivation had begun to extend beyond the Mississippi, Woodbury's Report, estimating the production per acre at a little less than two hundred and fifty pounds, considered the whole amount of land then devoted to cotton raising to be not far from two million acres.² From calculations made on the basis of the census of 1840, De Bow estimated the number of acres devoted to the cultivation of cotton at 4,500,000,³ and in 1850, as superintendent of the Seventh Census, he estimated the cotton area at five million acres.⁴ The census of 1860 estimated the large crop of cotton grown that year to be the product of 6,968,498 acres, but as already mentioned, later and more careful estimates nearly double the acreage. It is quite probable that the estimates of early years were also too conservative, and that the entire acreage was larger than it was then supposed to be. But even if the later estimate of 13,000,000 acres for 1860 be allowed, we still find the total acreage to have been less than four per cent. of the landed area of the ten great cotton states. Nearly all the tillable land in these states was capable of cotton production, and yet the demand for more land for the cultivation of

¹ "The entire area in cotton in 1860 was certainly not less than 13,000,000 acres." Report of United States Commissioner of Agriculture, 1876, p. 120.

² Woodbury's Report, 19. De Bow, "Industrial Resources," I: 175, considers this estimate too low.

³ "Industrial Resources," I: 175.

⁴ Compendium of Seventh Census, 176. Estimated acreage of other crops: Indian corn, 31,000,000 acres; hay, 13,000,000 acres; wheat, 11,000,000 acres; oats, 7,500,000 acres.

this staple constituted the basis of the southern clamor for an extension of the federal domain.

The preceding pages have made us familiar with the so-called "colonial system of agriculture," as applied to the cultivation of tobacco, rice and indigo, and we have learned the results of this reckless method of cultivation on the fertility of the soil.¹ The colonial system was the only system in vogue when the era of cotton culture began, and the cultivation of this plant, therefore, came under the same unfortunate methods of farming as were pursued in the culture of the other southern staples. Only in the sea island cotton producing districts was there any notable improvement in agricultural methods due to the introduction and extension of cotton culture. Early experiments in the culture of this variety of cotton showed that its price was greatly heightened by improvements in its quality, and this fact led the planters of the long staple cotton to use great care in the selection of the seed and in the subsequent cultivation of the plant.² Throughout the great cotton belt, however, where either the upland or New Orleans cotton³ was cultivated, but little attention was given to methods of agriculture, that method being considered the most profitable which raised the largest crop with the least trouble to the planter.

The method of clearing cotton lands, while not char-

¹ Above, pp. 38-42.

² H. Hammond, "Cotton Production in South Carolina," Tenth Census, vol. VI, 476-7. "The Culture of Cotton," in "The Cotton Plant," 231.

³ The New Orleans or Gulf cotton, superior to the upland varieties, although of the green seed species, is supposed to be the result of a crossing of the upland with the sea island cotton, as large quantities of cotton seed of the latter variety were shipped to Louisiana shortly after its purchase by the United States. De Bow, "Industrial Resources," I: 120. Seabrook, *Op. Cit.*, 15-16.

acteristic of the southern states alone, and considering the abundance of timber and the scarcity of labor in the early years, often justifiable, seems to the scientific agriculturist a very wasteful one. Weak handed planters in selecting a site for a plantation in a timbered region, first cut through the bark a ring around the larger trees. This caused the trees to die. The smaller trees were at once cut down and burned, and the ground broken up and planted. In a few seasons the wind would blow down the deadened trees, which would then be rolled together in log heaps and also burned. Usually a few crops of Indian corn or wheat would be taken off the land before the fields were ready for cotton.¹

The methods of planting and cultivating cotton while slavery continued were very simple, and with few variations were the same throughout the South. After preparing the land for cultivation by breaking down the cotton or corn stalks of the previous year, the field was laid off in beds by plowing a furrow between the old rows and lapping on this from four to six other furrows, according to the size of the plow and the desired distance between the rows. The field was thus left in ridges about four feet apart. After the ground had been pulverized by a small harrow, the ridges were split open with a small plow, and the seed was sown into this furrow at the rate of two or more bushels per acre. This was usually done by a negro woman, who carried the seed in her apron and strewed the seed several feet along the furrow at each cast of the hand. The furrow was closed by means of the harrow or a board which had a concave under surface to fit the crest of the ridge, and was screwed to a small shovel or "scooter" plow. When the cotton had attained a height of several inches,

¹ Mills, "Statistics of South Carolina," 66r.

the laborious process of thinning began. This was done by means of a hoe, followed (sometimes preceded) by a plow to again round up the ridge, and to keep the space between the rows free from weeds. With the hoe the grass on the sides of the ridge was cleaned away, and the cotton blocked out in the rows, leaving two plants (eventually only one) in hills twelve or fourteen inches apart. The cotton continued to be cultivated in this way with the hoe and plow or with an implement called a "sweep," at intervals of about twenty days, until nearly picking time, the ground being thus gone over from three to five times.¹ Planting began as early as the end of February in some of the eastern states, and was often not ended until the middle of May in the Southwest. The first blooms usually appeared in May and June, and picking began about the first of August in the east and continued until the middle of December in the west.² This was a tedious but not laborious task, and in its accomplishment women and children as well as men were employed. In the early part of the century, fifty pounds a day were accounted the average per hand, but by 1854 Wailes states that "the children double this; and two hundred pounds is not unfrequently the average of the whole gang of hands, to say nothing of those who pick their four or five hundred pounds of cotton."³

There were few agricultural implements employed in the cultivation of cotton previous to the war, and such as were in use were of a very simple order. Machinery

¹ Patent Office Report (Agriculture) 1849-50, 313-316. Wailes, Report on Agriculture and Geology of Mississippi, 1854, 150-155. Report of the Commissioner of Agriculture, 1867, 414.

² Levasseur, "Agriculture aux Etats-Unis," 121. Cf. H. Hammond, "The Culture of Cotton," in "The Cotton Plant," 262.

³ Wailes, "Report on Agriculture and Geology of Mississippi," 1854, 154. Cf. H. Hammond, "The Culture of Cotton," *Loc. Cit.*, 264-5.

was not used at all in the cultivation of southern crops. The tools employed were usually the work of the neighborhood blacksmith, or were made on the plantation, "in a style which was the excess of bungling."¹ Such were the "scooter" or "bull tongue," a strip of four inch bar iron, pointed and bent, used for opening the furrow in which the seed was sown;² the "sweep," an implement having two wide-cutting blades forming two sides of a triangle, and used for cleaning the grass or weeds from the rows;³ and the "scraper" already described, used for covering the furrow in which the seed had been sown. These tools, together with the clumsy all-iron breaking plows and turning plows, and the hoe, "the rudest, the least effective and the most exhaustive to strength and patience of any tool largely used,"⁴ were about the only implements that were in use on the southern plantations before the war. Even "cotton planters" were not widely used. Seabrook reports that as late as 1844 the plow was unknown to the growers of the long staple cotton, except "in the breaking up of the soil, and, as an assistant, in forming the ridge."⁵ The slight expenditure for agricultural implements is illustrated by the statement of DeBow that on a South Carolina plantation of 4200 acres, 2700 of which were under cultivation, and where two hundred and fifty-four slaves were employed, the capital invested in all plantation tools and implements, including wagons, was only equal to \$1,262, and on an Alabama plantation of 1100 acres, with 120 slaves, the implements were valued at \$500.⁶

¹ Report of the Commissioner of Agriculture, 1867, 424.

² *Ibid.*

³ Wailes, *Op. Cit.*, 152.

⁴ Report of Commissioner of Agriculture, 1866, 208.

⁵ "Memoir on the Origin, Cultivation and Uses of Cotton," 23.

⁶ De Bow, "Industrial Resources," I: 162-3.

Much was written by southern agriculturists and editors previous to 1860 on the subject of fertilizers for cotton. Nevertheless, the use of this artificial means for restoring fertility to the soil was a very limited one. In 1808, Ramsay wrote of the South Carolina planters as follows: "The art of manuring land is little understood and less practiced. The bulk of the planters, relying on the fertility of the soil, seldom planting any but what is good, and changing land when it begins to fail for that which is fresh, seldom give themselves the trouble to keep their fields in heart."¹ Although there were thousands of acres of pasture lands which could have been utilized for raising stock or for raising hay to feed the cattle in winter, although there were numerous beds of compost and marl scattered throughout the southern states, "ample for a perpetual supply of all possible drain upon the resources of the soil,"² and although the long coast line was able to furnish "abundant stores of fish and seaweed for manuring adjacent fields,"³ very few of the planters knew of the value and use of these fertilizers, and of those who did know, but few applied them.⁴

Cotton is said to be the least exhaustive to the soil of any of the great staple crops of America,⁵ and if the seed is returned to the soil there is comparatively little of the vitality of the land withdrawn by cultivation, but even this slight effort at fertilization was not resorted to by the majority of the cultivators. There were always, of course, a few planters who gave their attention to improved methods of cultivation and made a profitable use

¹ Ramsay, "History of South Carolina," II: 225.

² Report of the Commissioner of Agriculture, 1867, 427.

³ *Ibid.*

⁴ Patent Office Report (Agriculture), 1852-3, 387-8.

⁵ Hilgard, Agriculture and Geology of Mississippi, 242.

of fertilizers, and there were many more who scattered on their lands the cotton seed or the small supplies of stable manure which had collected over winter. So little attention was given to stock raising,¹ however, and to the preservation of the stable manures, that these feeble efforts to delay exhaustion were of little avail. The planters in the rich bottom lands along the Mississippi, hauled the cotton seed into the bayous to be eaten by the hogs or to be carried into the Gulf by the "Father of Waters."²

(During the later years of the slave régime cotton seed became a valuable article for the market and the planters began hauling it to the cotton seed mills. Had they stipulated for a return of the hulls after the oil had been extracted, and returned these to the soil, there would still have been but little loss to the soil and perhaps a gain,³ but few of them did this. Land was so little valued that the owners did not consider it profitable to attempt to maintain the fertility of old lands when new ones of greater fertility were to be had almost for the asking. It was considered more profitable to withdraw the entire wealth from the soil than to replace it, more profitable to "kill land" than to cultivate it.⁴

As was naturally to be supposed, the first signs of exhaustion came from the Atlantic coast states, and some attention had been given in the Carolinas and Georgia during the '50's to restoring the fertility of the soil by means of manuring and crop rotation.⁵ In the South-

¹ Report of the Commissioner of Agriculture, 1867, 425.

² Hilgard, *Op. Cit.*, 245. Von Halle, 290.

³ Hilgard, *Op. Cit.*, 244-5.

⁴ White, "The Manuring of Cotton," in "The Cotton Plant," Bulletin No. 33, Office of Experiment Stations, Dept. of Agriculture, pp. 170-171.

⁵ H. Hammond, "Cotton Cultivation in South Carolina," 13. Tenth Census of the U. S., VI.

west, however, no attention was given to this subject until some years after the war, and even in the eastern states the proportion of fertilized land was insignificant.

The failure of the cotton planter to use fertilizers he did not atone for by adopting any other measures for the prevention of soil exhaustion. Rotation of crops was almost unknown at the South where the one-field system of cultivation had come down from colonial days. The one great object was to raise cotton¹ and the land was planted in this crop for a succession of years, until it refused longer to bring forth a remunerative yield and was then "turned out" to grow up in briars, sassafras, and scrub pines.² "A purchaser looking for land, if he found a field without a stump, considered that fact *prima facie* evidence that it was worn out."³

The suitability of cotton for slave labor and the high prices which this staple often brought on the market stimulated the planters to raise cotton almost exclusively, and to raise it on lands which were better suited to other crops.⁴ The high prices of provisions compelled many of the planters, especially in the eastern states, to alternate corn with cotton, thus making a two-field system of cultivation. But such a change was of little value in preventing the wearing out of the lands for it violated the first principles of rotation introduced into agricultural science by the old three-field system of cultivation, which prescribed that crops of the same nature should not be planted in succession, but that a winter crop should succeed a summer crop with the land lying fallow the third year.⁵ Both Indian corn and cot-

¹ Hilgard, *Agriculture and Geology of Mississippi*, 241.

² Report of the Commissioner of Agriculture, 1876, 216.

³ *Ibid.*

⁴ Lieber, *Report on the Survey of South Carolina*, III.

⁵ Buchenberger, "Agrarwesen und Agrarpolitik, I: 32.

ton were summer crops, were cultivated in the same manner, and although their chemical analysis was imperfect, seemed to draw the same ingredients from the soil. Yet as late as 1860 this was the only regular rotation pursued on any large scale in the cotton belt.¹

Drainage and various systems of sub-soiling were measures often recommended for deferring, if not preventing, the exhaustion of the soil. The Tullian or Lois Weeden system, which combined fallowing with sub-soiling, was for some time a theme much discussed by "theoretical" agriculturists, but not many "practical" farmers had heard of it, much less made use of it. Deep plowing was little followed. The ground was usually scratched to the depth of about two and a half inches by the old iron breaking plows universally in use on the plantations, and when this shallow cultivation had ceased to be profitable, the planter removed to new lands.

This system of agriculture which was so rapidly depleting the cotton lands of their fertility, was not characteristic of the South alone. It had been the method universally practiced in all the North American colonies, and it is still the only system known on the wheat lands of the Northwest. Intensive culture has never been resorted to by any people or in any region as long as the extensive system has proven the more profitable. Labor and capital are too scarce in a new country to admit of any other than an extensive system being pur-

¹ Hilgard, *Op. Cit.*, 241. By an investigation made by the Bureau of Agriculture in 1867, as to the amount of land cultivated in various crops previous to the war, it appears that in the ten cotton states cotton occupied on an average 44 per cent. of the tillable area, and corn 38 per cent. Report of the Commissioner of Agriculture, 1867, 414. Von Halle, *Op. Cit.*, 289-90.

sued. "New settlers are not censurable for beginning this exhaustive culture."¹

But what was notable about southern agriculture was that even the apparent injury done to the land by the "one crop" system had little or no effect in bringing about a change in the methods of cultivation. "The system is such," wrote an editor of a southern agricultural paper in 1860, "that the planter scarcely considers his land as a part of his permanent investment." It is rather a part of his current expenses. He buys a wagon and uses it until it is worn out, and then throws it away. He buys a plow, or hoe, and treats both in the same way. He buys land, uses it until it is exhausted and then sells it, as he sells scrap iron, for whatever it will bring. It is with him a perishable or movable property. It is something to be worn out, not improved. The period of its endurance is, therefore, estimated in its original purchase, and the price is regulated accordingly. If it be very rich, level land that will last a number of years, the purchaser will pay a fair price for it. But if it be rolling land, as is the greater bulk of the interior of the southern states, he considers how much of the tract is washed or worn out, how long the fresh land will last, how much is too broken for cultivation, and in view of these points determines the value of the property."²

As the land became exhausted in the old cotton states, such as South Carolina and Georgia, the planters abandoned their estates and moved farther west to Alabama or Tennessee, there to begin over again the process of "land killing" and then, perhaps, once more desert

¹ Patent Office Report (Agriculture), 1852-53, 374.

² C. W. Howard of Georgia, Patent Office Report (Agriculture), 1860, 226.

their fields and settle on the virgin soils of Arkansas or Texas. Of those who did not leave the older states, many abandoned cotton culture. The cotton crop of 1860 showed an increase of more than 100 per cent. over that of 1850. But the increase in the Atlantic coast states was only 44 per cent., while in the western states, Tennessee, Alabama, Mississippi, Louisiana, Arkansas and Texas, the increase was over 153 per cent.¹ The crop of 1850 was about an average one for the decade 1851-60. If we could compare by states the average crops for the two decades, it is doubtful whether we would find much, if any, increase in the production of the Atlantic states.

While the value per acre of the occupied land in the older states of the North was several times greater than in the new states to the west of them, in the South directly the opposite of this was true. In 1850 the occupied land in the Atlantic coast states was valued at only \$5.34 per acre, while that of the southwestern states was worth \$6.26 per acre.² "What are we to do in South Carolina?" wrote ex-Governor Hammond of that state in 1858. "But a small proportion of the land we now cultivate will produce two thousand pounds of ginned cotton to the hand. It is thought that our average production can not exceed twelve hundred pounds, and that a great many planters do not grow over one thousand pounds to the hand. . . . A great deal has been said upon [the improvement of our agricultural system].³ Neither our agricultural societies nor our agricultural essays have affected anything worth speaking of. And

¹ Percentages deduced from census returns of 1860. See Preliminary Report of the Eighth Census, 201.

² Compendium of Seventh Census, 175.

³ Words in brackets an abridgement of the thought expressed.

it does seem that, while the fertile regions of the Southwest are open to the cotton planters, it is vain to expect them to embark, to any extent, in improvements which are expensive, difficult or hazardous. Our cotton region is too broad and our southern people too homogeneous for metes and bounds to enforce the necessity of improving any particular locality."¹

But the low prices and greater fertility of the western lands were not the only reasons why the exhaustive system of land cultivation continued at the South. The same opportunities for western expansion existed at the North, and while the methods of cultivation there were far from perfect, it had been found more profitable in New England and the Middle states to manure the ground and to rotate the crops when the fields showed signs of exhaustion than to abandon them for western lands. Only the surplus population was sent to the new states.

The diversity of crops grown was much greater in the North than in the South, and this permitted the adoption of a more complex and beneficial system of tillage than the one or two field systems. In the South the greater crops of all the slave holding states were hoed crops, cotton, corn, tobacco, and sugar cane, and a rotation of these was of little value in preserving the fertility of the soil. To some extent the planters were excusable for not cultivating other crops. Wheat and other small grains were often unprofitable on account of the rust. For many other commodities there was no market. A diversified system of farming demands to a large extent a local market, for many kinds of produce raised under this system, such as vegetables and fruits, will, on account of their perishableness, difficulty of transpor-

¹ De Bow, "Industrial Resources," III : 24-5.

tation, etc., meet with only a local demand. The small urban population of the South, itself largely a result of the difficulty of applying southern labor power to urban pursuits, created very limited local markets. There were in the ten great cotton states in 1850 but seven cities having each 8,000 or more inhabitants, and in 1860 there were but eleven such cities.¹ With the exception of Indian corn, such crops as were raised were produced for the world market. Corn was raised only for domestic use. With bacon it constituted almost the only food used by the slaves and a considerable portion of the whites. As the corn fattened the hogs as well as the negroes, the subsistence of the laboring population was practically conditioned by the supply of this one commodity. This explains its extensive cultivation at the South. But corn was never intended to take the place of cotton as the principal crop. Cotton was given the best lands,² and by many planters not enough corn was raised to supply the needs of the plantation.³

¹ Preliminary Report of the Eighth Census, 244-6.

² Milton Whitney, "Climatology and Soils," in "The Cotton Plant," 143. Professor H. C. White, however, says, that "previous to the civil war, the best lands of the plantations were devoted to food crops." "The Manuring of Cotton," in "The Cotton Plant," 171.

³ "A belief that cotton and rice are the most profitable crops, has for many years, induced the planters to bend their undivided efforts to the raising of these two staple commodities. The result is excess of production in reference to cotton. . . . It is not probable that the demand for cotton will ever exceed the supply Shall over-cropping, the great bane to good agriculture, still mark the career of the southern agriculturist? [Is it not feasible] for him to realize his present profits, but accompanied with the desirable correlative of food sufficiently abundant at least for domestic purposes? That our practice, hitherto, has not produced those benefits which with a different course of husbandry would be likely to ensue, is demonstrable, in the want of other evidence, solely from the fact, that in 1801, the value of the rice, indigo, and tobacco exported from Charleston, was not much less than the total average value of domestic and for-

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Another important reason for the continuance of the "one field" system of agriculture lay in the speculative character of cotton raising. Taken year after year the culture of cotton did not yield such large profits as would have resulted from a diversified system of farming, and it often proved the occasion of loss. Thousands of planters heavily in debt had their crops pledged to the cotton buyers long before they were harvested, possibly even before they were planted.¹

Notwithstanding these failures, the high prices which resulted when there was a failure of the crop elsewhere, furnished the planter an incentive to continue the "one crop" system, and to rely on his cotton crop to pay off the debts which its exclusive cultivation had brought upon him. "As I have no disposition to gamble, or invest in lotteries, I do not raise cotton," wrote one Arkansas planter who had become disgusted with the speculative character of cotton raising and had gone over to a diversified system of farming.²

But it was the ease with which the planter could remove to other lands when the old plantation fields had become exhausted, that furnished the principal reason for

eign productions exported from the whole state from 1824 to 1826, inclusive, whereas an excess of about 50,000,000 lbs. of cotton was raised. . . . [The South Carolina planter] is now, perhaps, the most dependent agriculturist in the Union. For the last five years we have imported 530,000 bushels corn; 100,000 bushels oats; 20,000 bundles hay averaging about 375 lbs. each. At their current value the tribute money of South Carolina has been in five years, on those three articles only, \$406,000; the interest of which is sufficient to reclaim permanently upwards of 2,800 acres of the immense area of our swamps." Whitmarsh B. Seabrook, address delivered at the First Anniversary meeting of the United Agricultural Societies of South Carolina, held in Columbia, Dec. 6, 1827. *American Farmer*, X: 95-98. Cf. also, Olmsted, "The Cotton Kingdom," I: 17-18; Report of the Commissioner of Agriculture, 1866, 414; Von Halle, 269.

¹ Olmsted, "The Cotton Kingdom," II: 16-17.

² Report of the Commissioner of Agriculture, 1867, 420.

the failure to adopt an intensive system of agriculture at the South. The comparatively sparse population of this part of the country, due to the fact that the lack of respect for labor there discouraged immigration, limited the demand for new lands largely to those who were pursuing the system of cultivation by exhausting the old lands. The limited competition for land therefore kept the price down to where it was cheaper to take up these new tracts than to keep up the fertility of the old fields, and this fact permitted the extensive system of cultivation to continue longer without being felt than would have been the case had conditions been otherwise. No planter thought of holding only such land as he wished to cultivate at one time. In taking up a new tract of land, he did it with the intention of cultivating only a part of it and then "turning it out" and bringing into cultivation another portion of the plantation. Of the land in farms in the old cotton states, the Carolinas and Georgia, over 70 per cent. was unimproved in the decade 1850-60, while the New England and Middle States, with less fertile soils, showed approximately two-thirds of their farm lands to be under cultivation.¹ The habit of considering the negro slave rather than the land the investment, made it easy and inexpensive for the planter to remove from one part of the country to the other. Capital and labor were united in the person of the negro slave, and the planter who had once decided to emigrate found it easy to take his property with him.

The part played by compulsory labor in the cultivation of the cotton plant previous to 1860 was so great as to almost completely identify in the mind of the observer the two institutions, the culture of cotton and

¹ Compendium of the Ninth Census of the U. S., 689.

negro slavery.¹ Slave labor was not confined to the cultivation of cotton, it is true. In the rice swamps of Georgia and the Carolinas and on the sugar plantations of Louisiana, slaves did nearly all the work, and they also formed a large proportion of the labor force of the Kentucky, Maryland and Virginia tobacco plantations. But the number of acres devoted to the production of these crops was comparatively small, and the number of negro slaves employed in their cultivation in 1850 was scarcely more than equal to the total number of slaves in the United States in 1790, before the real movement in favor of cotton had begun. The increase in the slave population after 1790 was absorbed mainly by the cotton industry, and we have already noted the wonderful effect which the expansion of this industry had upon the price of slaves.²

Although in the majority of cases the planter worked the plantation with his own negroes, the hiring of slaves from their master by the year was not unusual. The price paid varied, of course, not only with the age, sex and working ability of the slave, but also according to the section of the country. By an investigation made by the Bureau of Agriculture at Washington at the close of the war, it was ascertained that the average prices paid for agricultural labor in 1860 were about as follows:³

¹ Kapp, "Geschichte der Sklaverei in den Vereinigten Staaten," 101.

² Above, pp. 51-2. Cf. Von Halle, *Op. Cit.*, 204.

³ Report of Commissioner of Agriculture, 1866, 416.

	Men.	Women.	Youth. ¹
Virginia	\$105	\$ 46	\$39
North Carolina	110	49	50
South Carolina	103	55	43
Georgia	124	75	57
Florida	139	80	65
Alabama	138	89	66
Mississippi	166	100	71
Louisiana	171	120	72
Texas	166	109	80
Arkansas	170	108	80
Tennessee	121	63	60

Numerous estimates have been made as to the cost of maintaining a slave throughout the year. Obviously there is a wide room for disagreement here, for many varying factors need to be considered. On large plantations the average cost was less than on the small ones. Some planters raised enough corn and made enough pork to feed the negroes throughout the year, while others purchased all or nearly all the food supplies. Some planters furnished twice as much clothing to their slaves as others did. Some planters furnished meat as a regular article of diet. Others furnished it only occasionally. The shelter and clothing required by slaves in the border states was, of course, in excess of that needed in the mild climate of the Gulf states. From observations made and statistics gathered by De Bow, Russell and others, it would seem that on the large plantations the average cost of maintaining a slave throughout the year, including expenditures for clothing, food, tobacco, etc., and the payment of taxes, was not far from \$15, and that on the small plantations the expenditures for maintenance of the slaves often

¹ "In the term youth are included children of both sexes, of not less than fourteen years." Rations and clothing are included in the above table. Report of Commissioner of Agriculture, (1866), 416.

amounted to \$30 or \$40 per capita.¹ Perhaps the average expense for maintenance of the slaves, young and old, throughout the cotton belt, would be not far from \$20 per annum.

Merely from a business standpoint it was to the interest of the planter to furnish sufficient food and clothing to his slave to keep him in health and good working order; and suffering for want of food was no doubt a thing of seldom occurrence. This food, however, was of a coarse kind, and though healthy, lacked variety. Olmsted considered it inferior to that furnished prison convicts at the North.² From four to six (sometimes as high as ten) quarts of corn meal and a quart of molasses, were usually dealt out to the negroes each week. To this were sometimes added vegetables in their season and usually half a pound of bacon for every able bodied negro.³ Louisiana was the only state which required by law the furnishing of meat to slaves, and even there it does not seem always to have been observed,⁴ although it was generally practiced throughout the South. On most of the plantations the negroes were allowed to cultivate "truck patches," and to raise poultry and sometimes a pig. What produce thus raised they did not themselves consume, they sold, and invested the returns in tobacco, whiskey and Sunday finery.

On some plantations, however, the slaves were not allowed to cultivate these "patches," for it tempted them to reserve for cultivating their gardens in the

¹ De Bow, "Industrial Resources," I: 150, 162. Russell, "North America: Its Agriculture and Climate," 180. Public Documents, VI: (1846), 574.

² "The Cotton Kingdom," II: 241. Cf. Von Halle, *Op. Cit.*, 248-9.

³ DeBow, "Industrial Resources," II: 331; Russell, *Op. Cit.*, 166; Olmsted, *Op. Cit.*, 180, 240.

⁴ Olmsted, *Op. Cit.*, 241. Cf. Von Halle, *Op. Cit.*, 239, note 2, 248.

evening the strength which should have been expended in the cotton field.¹ The hours of work on the cotton plantations were from sunrise to sunset. During the picking season the negroes worked as long as they could see. South Carolina had a statute forbidding the working of slaves for more than fifteen hours a day.² Noon "rests" of from one to two hours were not infrequent, though far from universal.³

In eastern Georgia and South Carolina the work was performed by "tasks." Each laborer had assigned to him the amount of work which he was expected to do in a day, such as hoeing from one half an acre to an acre of corn or cotton, or picking a certain amount of cotton.⁴ When he had finished his task, if there were time left, the slave was allowed to use it as he pleased. This method of "tasking" was greatly preferred by the slave to any other method of working. Many finished their "tasks" by the middle of the afternoon. The slaves were worked in "gangs," and were classed as "full hands," "three-quarter hands," "half hands," and "one-quarter hands," these terms referring to the portion of a "full hand's" work which was required of each slave.⁵ "Every negro knows his rate and lawful task so well that if he thinks himself imposed upon by the driver he appeals at once to the master."⁶

¹ *Southern Cultivator*, quoted by Olmsted, *Op. Cit.*, II: 239. See also De Bow, "Industrial Resources, II: 331.

² Olmsted, "The Cotton Kingdom," II: 180.

³ *Ibid.*, 170-80. Von Halle, 239.

⁴ "The task in listing was formerly half an acre; in ridging, three-eighths of an acre; and in hoeing half an acre. The present (1844) tasks are less except in hoeing which is the same." Seabrook, "Memoir on the Origin, Cultivation and Uses of Cotton," 24.

⁵ Olmsted, *Op. Cit.*, I: 248-9. Von Halle, 294.

⁶ Captain Basil Hall. "Travels in North America in the years 1827 and 1828," II: 231-2.

The "tasks" were set by the drivers, whose business it was to see that they were performed. Drivers were usually selected from among the stronger and more intelligent slaves.¹ White overseers were required by law on each plantation where the owner did not himself personally superintend the work. On the smaller plantations the overseers were also the drivers.

The overseers of the plantation were generally selected from the lower grades of whites and did not enter the best society of the South.² They were often of a brutal character. Their wages varied from \$200 to \$600 a year, but sometimes \$1,000 or \$1,500 was paid when the planter did not reside on the plantation and the overseer had entire responsibility.³ The overseer was valued according to the crop which he was able to make,⁴ and therefore many of them worked the slaves with little regard to the health and endurance of the latter. Mr. W. W. Phillips of Jackson, Mississippi, one of the most intelligent planters of the South, wrote as follows to an agricultural paper, *The Southern Planter*: "Overseers are not interested in raising children, or meat, in improving land, or improving productive qualities of seed or animals. Many of them do not care whether property has depreciated or improved, so they have made a crop [of cotton] to boast of."⁵

¹ Olmsted, *Op. Cit.*, I: 249-50. Russell, *Op. Cit.*, 180.

² Russell, *Op. Cit.*, 258. "The best overseers ordinarily are young men, the sons of planters who take up the business temporarily as a means of acquiring a little capital with which to purchase negroes for themselves." Olmsted, "The Cotton Kingdom," II: 201.

"The overseers, it should be stated, are seldom southern men, but mostly 'Yankees' from the New England states, or indubitable Scotchmen, gaining their first footing in the world by a mode of life to which their poverty rather than their Calvinism or their education reconciles them." Mackay, "Life and Liberty in America," 176.

³ Olmsted, *Op. Cit.*, II: 185. Von Halle, 292-3.

⁴ Von Halle, *Op. Cit.*, 293.

⁵ Quoted by Olmsted, *Op. Cit.*, II: 187.

The custom of valuing the overseer according to the amount of work which he could get out of the negroes, led to frequent changes in overseers, one being rarely employed more than two years. "Two years of service is sure to spoil them."¹

It is much easier now, after thirty years experience of free labor in the cotton fields, to judge of the relative advantages of free and slave labor in the cultivation of this staple. The number of free laborers employed prior to 1860 was small, and the conditions of their employment were usually so different from those of slave labor that comparison between the two systems is necessarily imperfect. Yet the opportunities for such comparison were not wholly wanting and the results warrant us in saying that it was a misfortune for southern agriculture that slave labor was ever applied to the cultivation of the cotton plant. As has been pointed out in the preceding chapter, cotton culture offered many and great advantages over other crops for the use of slave labor; but slavery had few, if any, advantages over free labor for the cultivation of cotton. On the sugar and rice plantations on the low marshy coast land, where the climate was unpropitious for whites, there was probably an economy in the use of slavery so long as the colonial system of agriculture was itself profitable, and perhaps the same was true of the Mississippi river bottoms. But there were no climatic disadvantages for whites throughout the greater part of the cotton belt, where the use of slave labor was directly responsible for the perpetuation of the "one field" system of agriculture long after that method of tillage had survived its period of usefulness and had succeeded in completely exhausting the fertility of the once productive soils.

¹ Russell, "North America," 258.

Slave labor probably cost absolutely, though not relatively, less than free labor,¹ and the owner had the advantage of absolute control over the laborer's services. But this was more than offset by the lack of interest which the slave took in his work.² His low cost of maintenance did not make up for his waste of his master's property. The slave learned methods of agriculture slowly, and he therefore worked best when employed in cultivating only one crop. And as to allow him to remain idle was to lose for the time being the use of almost the entire capital of the planter, it became necessary to furnish employment which should last throughout the year. The cultivation of cotton spread over three-fourths of the year, and, together with the clearing of new lands, furnished continuous employment to slave labor, which the cultivation of the cereals, the raising of grasses, vegetables, fruits, etc., would not have done.³ The slave, therefore, stood in the way of the adoption of a rotative system of agriculture. While cotton raising by means of slave labor was an industry of increasing or even constant returns, the profits of the planter were invested in new lands and more slaves. When the industry reached that point in diminishing returns where the profits disappeared, the planter, instead of reducing his labor force and landed property for the purpose of adopting an intensive system of farming, found greater profit in breeding slaves for the planters on the still unexhausted western lands.

The one great advantage which Mr. Russell, who seems to have been favorably impressed with the slave system, found in the cultivation of cotton by means of

¹ Russell, "North America," 136.

² Von Halle, *Op. Cit.*, 242-243.

³ *Ibid.*, 292.

slave labor, was the "organization and division of labor," of which their numbers permitted on the large plantations.¹ This seems to have been a conclusion derived from *a priori* reasoning, rather than from observation, for there were no large plantations worked by free labor previous to the Civil War. But, at most, this statement could have been true for large plantations only, and the general proposition that slave labor was more profitable than free labor would, therefore, rest on the hypothesis that the system of *grande culture* was more profitable for cotton than *petite culture*. Mr. Russell assumed that it was,² and as he was logical enough also to hold that the system of growing corn and cotton continuously until the land was so exhausted that it had to be abandoned "to nature for a series of years," was the best system which could be pursued in cotton culture,³ his assumption based on this premise was doubtless a correct one. But the scientific agriculturists of the South did not agree with Mr. Russell as to the wisdom of the exhaustive system of agriculture, although there were apparently few of them who were willing to ascribe this system to the maintenance of slavery.⁴

Of the free labor which was engaged in the cultivation of cotton, the greater part was of a class which was far from representative of the average intelligence and ability of American agricultural labor. Immigrants were repelled

¹ "North America, Its Agriculture and Climate," 285-6.

² *Ibid.*, 284.

³ *Ibid.*, 268.

⁴ See *De Bow's Review*, XXIX: (N. S., IV) 136-151; Gov. Hammond, "Progress of Southern Industry" in De Bow's "Industrial Resources," 24-37; Rev. C. W. Howard, (associate editor of *Southern Cultivator*), "Grasses for the South," Patent Office Report (Agriculture), 1860, 224-239; Edmund Ruffin, "Southern Agricultural Exhaustion and Its Remedy, Patent Office Report (Agriculture), 1852-53, 373-389.

from the South by the stigma cast on labor in a slave region. The majority of the white laborers were of the class of "poor whites," many of them descendants of the "redemptioners," "servants sold for the custom," and "indentured servants" sent into the colonies by Great Britain from the London streets and the debtor prisons. Released from their period of bondage, and finding it impossible to enter the social ranks of the property-holding classes, and with their labor despised because of the association which it had with slavery, these people and their descendants had become the parasites of southern society. Some of them were forced into the mountain region of eastern Tennessee and Kentucky and western North Carolina, and others were left on the abandoned cotton and tobacco lands of the sand hill region of South Carolina and Georgia. Even in the western states they were always found on the poorer lands.¹ These people obtained a scanty subsistence by raising on their depleted soils small quantities of Indian corn, vegetables, and cotton, or quite often by stealing from their wealthier neighbors on the large plantations.² In addition to the cotton which they used in their homespun garments, these small farmers usually raised one or two bales for market. Those among them who had any ambition to advance in the world, purchased a slave as soon as they were able. With one slave secured, it was easy to purchase another on credit.³

Yet even with this poor grade of white labor, a considerable quantity of cotton was produced for market,⁴ and something is to be said for it if it could afford to

¹ Olmsted, "The Cotton Kingdom," II: 291-2.

² *Ibid.*, I: 231, 252, 372. Von Halle, *Op. Cit.*, 258.

³ Russell, *Op. Cit.*, 300. Von Halle, *Op. Cit.*, 259.

⁴ Russell, *Op. Cit.*, 285. Report of Commissioner of Agriculture, 1867, 196.

raise cotton on lands on which slave labor was not profitable. Even Mr. Russell recognized that slave labor was only suited to the rich lands, and that in the pine barrens, under the small farming system, free white labor had the advantage.¹ For, in spite of the competition of the large planters, it was by the cultivation of cotton that these small farmers made their profits.²

But the best example of the advantages of free labor in the cotton fields, the only example, in fact, which should be taken to fairly compare the two systems, was the cultivation of cotton by the German settlers around New Braunfels, on the plains of Texas. Mr. Russell failed to take account of this, probably because he did not believe that Texas was destined to become a great cotton producing region.³ This comparison between free and slave labor is eminently fair to slavery, for the two systems here competed on virgin soil, on which slave labor was always employed with its maximum advantage. The small farms worked by the whites were under many disadvantages, due to larger proportional expenses for fencing, for farm implements and animals, and for ginning. The small farmer was also obliged to sell his cotton through middlemen, while the large planter dealt directly with the exporter.⁴

Notwithstanding these disadvantages the Germans prospered in the cultivation of cotton, and although they were only a mere handful in number, they were able to send ten thousand bales of cotton to market in a single year.⁵ Their fields were cleaner picked and the work-

¹ Russell, *Op. Cit.*, 285-6, 289, 293-4.

² Olmsted, *Op. Cit.*, II: 267. Cf. Von Halle, *Op. Cit.*, 200.

³ Russell, "North America," 294.

⁴ Olmsted, "The Cotton Kingdom," II: 266-7. Cf. Von Halle, 353-4.

⁵ Olmsted, *Op. Cit.*, 265.

ers showed more skill and intelligence at their work than the slaves who had been reared in the cotton field.¹ The cotton which they sent to market was also better cleaned and baled and was worth from one to two cents more per pound than the cotton cleaned by slave labor.² Their methods of cultivation, their lands and farm improvements and their standard of living, were far better than those of their wealthy slave owning neighbors.

The reader will have already understood that the characteristic form of the cotton plantation was the large estate. Not all the large landed properties in the South, however, were confined to cotton culture. Many of the large plantations were already in existence when cotton culture was introduced. Their origin is to be traced partly to the social customs of the early settlers, many of whom were the sons of the English landed gentry; partly to the facilities of commerce offered by the wide and slowly moving rivers in the southern colonies, along whose banks the large plantations were usually to be found; partly to the laws of inheritance existing in the southern colonies; and partly to the nature of the commodities which were raised on these plantations, tobacco, indigo and rice, the cultivation of which required more capital than was possessed by the small farmer. The large plantation owed its existence, most of all, however, to the labor system which existed in the southern colonies where either slave labor or compulsory white labor was the prevailing form. The organization and superintendence of enforced labor was more easy and more economical on the large plantation than on the small one.

¹ Olmsted, *Op. Cit.*, 263.

² *Ibid.*, II: 263. Von Halle, 201. The cotton raised by these Germans was known at the North as "free cotton," and was sought after with great avidity by cotton manufacturers.

In spite of the hopes and predictions of many southern writers at the close of the 18th century, the introduction of cotton culture did not result in a change from the large plantation system of agriculture to that carried on on small holdings. The tendency did, indeed, at first seem to be in that direction. The more industrious of the poor whites who had lacked the capital for engaging in the cultivation of indigo or rice, were often led to take up a small holding, and with the aid of their families to engage in the raising of cotton.¹ The abolition of the law of primogeniture in South Carolina and elsewhere, also contributed to the breaking up of the large plantations. Besides in cultivating the sea-island cotton, it had been discovered that there were great profits in developing this grade of cotton to the highest degree possible, and this required intensive cultivation, such as could be carried on only on the small plantation. But notwithstanding these circumstances which seemed favorable to the development of the small estate, the great movement throughout the cotton belt was in the other direction. Cotton culture on large plantations offered great advantages to the slave holder over that of other crops. Such free labor as was to be found in the South was not of a character to push cotton raising on small estates by scientific methods of agriculture. It was easy to continue the old methods. And a system of agriculture which had no regard for the soil found its greatest profit by working as large a body of laborers and cultivating as many acres as could be successfully superintended by one man. The aim was to keep cost of production at a minimum.

For a number of years, therefore, the general tendency was to increase the size of the plantations. "Farms

¹ Ramsay, "History of South Carolina," II: 448-49.

have a tendency to decrease in size more rapidly where the land is poor than where it is rich."¹ In the older states, along the Atlantic coast, as the soil became exhausted, the planters who did not abandon their estates in order to seek out western lands, were forced to reduce the size of their holdings and to begin an intensive system of cultivation. This stage had been reached in the older states a decade before the emancipation of the slaves, and this is evidenced not only by the increased use of fertilizers and the adoption of a better system of agriculture, but likewise by the diminution in the size of farms. In the new states, however, the tendency towards smaller farms was not revealed previous to the Civil War. Not only do we find a failure to adopt improvements in agriculture, but with the exception of the first few years following the settlement of a state, when land speculators were selling out to new arrivals the lands which they had secured, we find the size of farms steadily increasing.

"Our wealthy planters," said Mr. G. C. Clay, a member of Congress from Alabama, in 1853, "with greater means and no more skill are buying out their poorer neighbors, extending their plantations, and adding to their slave force. The wealthy few, who are able to live on smaller profits and to give their blasted fields some rest, are thus pushing off the many who are merely independent."² Not until 1850 do we have statistical information as to the size of farms in the cotton growing states. But a comparison of the figures furnished by the reports of this and the following census shows the truthfulness of the above assertions.

¹ Russell, "North America," 35.

² Quoted from *De Bow's Review*, by Olmsted, "Seaboard Slave States," 576.

States.	Year Admitted to Union.	Number of Farms.		Average Size (Acres).	
		1850	1860	1850	1860
North Carolina. . .	Original member	56,963	75,203	369	316
South Carolina. . .	" "	29,967	33,171	541	488
Georgia	" "	51,759	62,003	441	430
Florida	1845	4,304	6,568	371	444
Alabama	1819	41,964	55,128	289	346
Mississippi	1817	33,960	42,840	309	370
Louisiana	1810	13,422	17,328	372	536
Tennessee	1796	72,735	82,368	261	251
Arkansas	1836	17,758	39,004	146	245
Texas ¹	1845	12,198	42,891	942	591

The average size of farms in the ten cotton states in 1850 was 273 acres. The size of cotton plantations, however, is said to have seldom been less than 400 acres. Some of the plantations contained over 10,000 acres.² There were in these same states in 1860, 3,634 farms of more than 1,000 acres each; 12,187 of more than 500 and less than 1,000 acres, and 113,625 containing from 100 to 500 acres each.³

In 1850 there were but 74,031 cotton plantations in the United States which produced more than five bales each.⁴ This divided into the estimated acreage of that year would give us approximately 675 acres as the average amount of arable land devoted to cotton production on each plantation within the ten cotton states.

¹ Texas but recently admitted when the census of 1850 was taken apparently presents an exception to the rule regarding increase in size of holdings. But its decrease in size of farms from 1850 to 1860 was due to the sale of lands by land speculators.

In all the cotton states, with the exception of North Carolina, there was between 1850 and 1860 an increase in the average amount of cultivated land in farms, the increase being 16.4 per cent. for the entire cotton belt. See Von Halle, *Op. Cit.*, 271.

² Compendium of Seventh Census, 175.

³ Report of the Statistician of the Bureau of Agriculture in Report of Commissioner of Agriculture, 1876, 129.

⁴ Compendium of Seventh Census, 178.

With the large plantations there naturally went large gangs of slaves. There were 347,525 families reported as holding slaves in 1850,¹ but this number was too large, for, as Helper has pointed out,² it included slave hirers. There were two persons reported by this census as holding each more than 1,000 slaves; nine who held more than 500 and less than a thousand; fifty-six holding from 300 to 500; 187 from 200 to 300, and 1,479 from 100 to 200.³ Whether or not these large slave properties were held by the holders of the large landed properties cannot be stated definitely. There is little doubt but that this was the case, however, for with few exceptions the slaves were employed almost exclusively in agriculture.⁴

Although there were many large estates in the slave breeding states and in the old cotton states, South Carolina and Georgia, the large cotton plantation was seen to its best advantage in the alluvial lands of Mississippi and Louisiana. Here was the cotton garden of the world, settled under the patronage of the state banks in the '30's, and containing perhaps the richest soil in the United States. The land was all taken up in large holdings and worked by slaves. The owner seldom lived on the plantation.⁵ Absenteeism was in fact one of the great evils of *grande culture* in the South.⁶ "It

¹ Compendium of Seventh Census, 94.

² "Impending Crisis of the South," 73.

³ Compendium of Seventh Census, 95. See further Von Halle, *Op. Cit.*, 275, where a comparison is made with the number of slave holders in 1860. There were in this year 384,900 families owning slaves, only 2,292 of which held more than one hundred slaves each. Thirteen of these held between 500 and 1000 each, and only one held more than 1,000.

⁴ Cf. Von Halle, 276.

⁵ Olmsted, "The Cotton Kingdom," II: 147.

⁶ Russell, "North America," 289-90.

may be computed from the census of 1850 that about one-half the slaves of Louisiana and one-third those of Mississippi belong to estates of not less than fifty slaves each, and of these, I believe nine-tenths live on plantations which their owners reside upon, if at all, but transiently."¹ The management of the estates was confided to overseers. These, as we have seen, found their value rated according to the crop which they made and the plantation, the slaves and other property suffered under their management of it. "Having once had the sole management of a plantation and imbibed the idea that the only test of good planting is to make a large crop of cotton, an overseer becomes worthless. He will no longer obey orders; he will not stoop to details; he scorns all improvements, and will not adopt any other plan of planting than simply to work lands, negroes and mules to the top of their bent, which necessarily proves fatal to every employer who will allow it."²

As the planters spent so little time upon their estates, they concerned themselves little with the farm improvements, such as buildings and fences. These were much inferior, not only to those on corresponding estates at the North, but also to those on the farms of northern farmers of only moderate means.³ The overseers were usually housed in frame houses of an inferior sort; large sheds sufficed for the storing of cotton until it was hauled to market; there was seldom much farm stock, and such as was to be found, including work horses and mules, was poorly housed and sometimes only half fed. The negroes lived in small log houses about twenty feet

¹ Olmsted, *Op. Cit.*, II: 233.

² From the *Columbia South Carolinian*, quoted by Olmsted, *Op. Cit.*, II: 188.

³ Russell, "North America," 289. Olmsted, "The Cotton Kingdom," II: 48.

square and containing usually only the one room. The big western plantations seldom raised sufficient provisions for their own laborers or the feed for the horses and mules, but were almost entirely devoted to cotton. "Large plantations," said Mr. Russell, "are not suited to the raising of hogs, for it is found to be almost impossible to prevent the negroes stealing and roasting the young pigs. This is one of the disadvantages in raising certain kinds of produce incidental to a system of slavery. The number of cattle which can be raised on the large cotton plantations, do little more than replace the draught oxen that are required. The sheep only supply the wool needed for clothing; and the mules used for ploughing are bred in the Northern States."¹

The maximum efficiency of slave labor was said to be secured when not more than fifty negroes were placed under the management of a single overseer. The difficulty of securing good overseers and the high salaries which were often paid them, however, frequently led to the placing of more than one hundred slaves under the supervision of one man.² Each overseer regulated the hours for work on his own plantation. What these hours were we have already stated.

The small plantations were for the most part in the old cotton states, the Carolinas, Georgia and Tennessee.³ Their owners, usually of the poor white class, were either non-slave holders or owned only a few negroes. The most of the land where the small plantations flourished consisted of pine barrens. The owner was usually his own overseer and sometimes his own slave driver, although those who had any social pride would not do

¹ Russell, *Op. Cit.*, 266.

² Olmsted, "The Cotton Kingdom," II: 201.

³ Report of the Commissioner of Agriculture, 1876, 129.

this degrading work. There was a greater diversity in the crops grown on these small farms in the hill country than on the large plantations, due partly to the fact that the land had been exhausted for cotton, and partly because the planter could not afford to buy his corn and bacon, as did his richer neighbors. More stock was also raised, although it was usually of an inferior breed and was ill kept. As stock was allowed to run at large, some of the states compelled the planters to keep up fences. This was a serious burden to the small farmer, for, owing to his small enclosures, the proportion of land given up to fences was a large one and the cost of construction and maintenance of these fences was considerable. In South Carolina, the state geologist estimated in 1858 that the cost of fences every ten years equaled the annual value of all the stock (cattle, sheep and hogs) which these fences were intended to prevent from becoming injurious to other property.¹

Methods of cultivation on these small plantations were, owing to the ignorance of the people, but little better than those on the large plantations. In some portions of the South, however, where the people were of a more intelligent character, the houses and farm improvements were good and the people lived in more comfort than even those living on the large plantations.² Domestic manufactures flourished in these neighborhoods. Each family spun and wove from wool or cotton the garments required for the use of its own members, while the neighborhood shoemaker and blacksmith supplied the shoes and farming implements required by the community.³

¹ Lieber, Report on the Survey of South Carolina, 26-7.

² Olmsted, "The Cotton Kingdom," II : 125.

³ *Ibid.*, 125-6.

The almost universal form of land tenure throughout the cotton belt was individual ownership, whether of large or small tracts of land. In the hill country, as we have already observed, the small farms predominated; elsewhere *latifundia* were the rule. The renting of land for agricultural purposes must have been extremely rare, for census and agricultural reports and travelers' accounts are alike silent in regard thereto.¹ Where the average price of occupied land was only five or six dollars per acre,² and new lands could be secured for from fifty cents to three dollars per acre, there would be small reason for any one renting land. It was not until the break up of the agricultural system of the South by the Civil War that land in the planting states came to have a rental value.³

Although nearly every writer who has attempted to describe southern agricultural conditions has had something to say about the credit system with which southern agriculture was involved, definite information concerning this interesting phase of rural economy previous to the war, is difficult to obtain. Pre-bellum writers have usually contented themselves with deprecating the practice of the southern farmer by which he rendered

¹ "The rent of land in Southern America as part of the cost of producing cotton could not be estimated by Mr. Finnie, [one of the planters engaged by the East India Company to go from America to attempt the culture of cotton in India according to American methods]. In the Southern States he said every planter is a landlord, from the squatter with his small section, to the capitalist with his twenty thousand acres. Land rent is thus unknown, and the value of an estate is never calculated so closely. A farmer who is compelled to sell takes what his neighbor is disposed to give him. . . . In a word, land in the southern states has no fixed value, but seems to fluctuate with the price of cotton." Wheeler, "Madras vs. America," 99.

² Compendium of the Seventh Census, 175.

³ Report of the Commissioner of Agriculture, 1867, 417-422.

himself dependent upon factors or merchants by pledging his crops months ahead of harvest in return for advances made by these factors, but they have told us little concerning the terms of the contracts or the extent of the practice. Later writers who have described the credit system have often overlooked the fact that this system existed previous to the war, and have seemed to indicate that liens on crops are a phenomenon which has been produced by the changes wrought in southern agriculture since 1865.¹

Yet agricultural credit is no new phenomenon in the South. The custom of "anticipating crops by engagements founded upon them" existed in South Carolina, according to Ramsay,² even before the Revolution, when advances seem to have been made by the English merchants. The desolation in the South caused by the war for independence increased the planter's need of obtaining credit,³ although the securing of this credit was rendered more difficult, "for the indulgence formerly granted to subjects in Carolina has seldom been extended to citizen planters."⁴ "The merchants, knowing the value of the staple commodities of Carolina, were very liberal of credit to the planters; but on terms of enhanced price, as a security against loss and protracted payments."⁵ And thus the obtaining of credit, which at first was a result of the necessity of beginning agriculture at all, continued either because of the lack of economy on the part of the planter, or because the

¹ Cf. Otken, "Ills of the South," 12; Holmes, "The Peons of the South", *Annals of the American Academy of Political and Social Science*, IV: 64 ff; *Ibid.*, "The Private and Public Debt in the United States," *Bulletin of the Department of Labor*, I: 53.

² "History of South Carolina," II: 222.

³ *Ibid.*, 428.

⁴ *Ibid.*, 222.

⁵ *Ibid.*, 428.

dependence upon one crop, which often failed, compelled the cotton growers to pledge future crops in order to continue planting.¹ "A few of the most shrewd and laborious [planters]," wrote Mr. James H. Lanman in 1841, "manage to accumulate large fortunes; yet the liberal and free indulgence of much the greater part scarcely enable them to pay their expenses from year to year and often, as is well known, the harvest of one year is, as it were, mortgaged for the expenses of the next, and those means which in the hands of some would be a source of vast profit, become in their hands a cause of mere competence."²

The chief borrowers in the cotton belt were the large planters. The small farmers in the hill country who raised their own provisions, and who bought little and sold little, had small use for the mechanism of credit, even if they had been considered desirable debtors. Negroes were usually sold on credit,³ even to the small farmer, however, provided he had already secured means to purchase one slave for cash. The possession of one slave seemed to be a guarantee that the owner would be able to pay for a second one. The desire to increase slave property was a frequent cause of the planter running in debt. "The majority of planters would always run in debt to the extent of their credit for negroes, whatever was asked for them, without making any calculation of the reasonable prospect of their being able to pay their debts. When any one made a good crop, he would always expect that his next one would be better, and make purchases in advance upon such expectation.

¹ Ramsay, "History of South Carolina," II: 395-6.

² "The American Cotton Trade," *Hunt's Merchants' Magazine*, IV: 226.

³ Von Halle, *Op. Cit.*, 279.

When they were dunned, they would attribute their inability to pay to accidental short crops, and always were going ahead risking everything in confidence that another year of luck would favor them and a big crop make all right."¹ In addition to their slaves, it was customary for a large part of the planters to buy on credit the provisions and clothing for the negroes and the tools and stock needed on the plantation. The factors at the port towns where the cotton was sold were usually the money lenders, although sometimes the merchants of New York made advances on the growing crops.² The merchants in the southern cities sold their goods on credit, charging necessarily much higher prices than when they sold for cash. Even then the risks were so great that in 1855 the Southern Commercial Convention recommended the chambers of commerce and commission merchants of the southern and southwestern cities, "to adopt such a system of laws and regulations as will put a stop to the dangerous practice heretofore existing of making advances to planters in anticipation of their crops—a practice entirely at variance with everything like safety in business transactions and tending directly to establish the relations of master and slave between the merchant and planter by bringing the latter into the most abject and servile bondage;" and they also recommended "the legislatures of the Southern and Southwestern states to pass laws making it a penitentiary offense for the planters to ask of the merchants to make such pecuniary advances."³ Very little seems to be known concerning the rates of interest or discount on loans made to the cotton planters previous to the war.

¹ Olmsted, "The Cotton Kingdom," II : 49.

² James H. Lanman in *Hunt's Merchants' Magazine*, IV : 224.

³ Quoted by Olmsted, "The Cotton Kingdom," II : 49-50.

Olmsted was told that farming land in the Mississippi Valley was usually sold on the installment plan, the purchaser paying down what he was able to pay and giving security for the remainder. The rate of interest in such cases was ten per cent. If the planter was unable to pay when the notes became due, he was obliged to borrow money from the Jewish money-lenders at New Orleans, paying often as much as twenty-five per cent. per annum for the loan, and pawning his furniture, jewels, carpets, etc., as security.¹ Mortgages on farming land were almost unknown at the South, the low value of land and the exhaustive system of culture making this form of security undesirable. A planter's wealth was gauged by the number of negroes he held, and not by the number of acres he owned.²

The crops then growing or yet to be planted became, therefore, almost the only security which could be furnished by the planter desiring to borrow money or purchase supplies. When a planter had prepared his ground for cotton he would go to the factor at the nearest market, describe his land, the number of acres he expected to plant, and the factor having satisfied himself of the truthfulness of the statement would make the desired loan, taking a lien on the crop as security. The rates of interest on these loans varied considerably, according to the commercial integrity of the borrower, the fertility of the land, etc., but the rates were always high as compared with interest rates at the North. "Every person familiar with the condition of trade in the Southwest," wrote a Southerner, "knows what an enormous tax is levied by factors on planters for the advances made the latter. Ten, twelve, fifteen or more per cent.

¹ Olmsted, "The Cotton Kingdom," II: 322.

² *Ibid.*, 303.

are the common rates of interest charged for these loans. Besides, the planter is placed completely in the power of the factor. The crop is often sold to satisfy the exigencies of the latter's situation. This custom is likewise most oppressive to the factor. It obliges him to keep up a large amount of capital, and exposes him to a variety of hazardous risks."¹ Many of the factors who had outstanding accounts with the planters at the outbreak of the war were completely bankrupted, owing to the inability of the latter to make good their promises of repayment.

In the preparation of cotton for the market great advances had been made previous to 1860. The original methods of ginning and packing were even more slovenly than the methods of tillage. The invention of the saw-gin and of the M'Carthy roller gin² revolutionized the methods of cleaning both the short and long staple cottons, but the methods of packing and shipping for many years lagged behind. During the early years of cotton culture, the cotton was thrown into canvass or gunny bags and compressed by tramping with the feet.³ Hence early trade statistics give cotton imports or exports by bags. "During the operation of ginning no bags or boxes received the cotton, and oftentimes large quantities were thrown together until the motors were prepared to examine them. In packing, an old iron axletree, or wooden pestle, the present [1844] instrument was used. There were no reinspectors of the cotton before it was deposited in the bag, in which the spinner would frequently find, in addition to a large supply of

¹ "Establishments of Credit, or What is Our True Policy? It is Herein Considered: By a Virginian." (1866), 21.

² Seabrook, "Memoir," 35. "Handbook of South Carolina," 38.

³ Joseph B. Lyman, "Cotton Planting," in Report of the Commissioner of Agriculture, 1866, 203.

leaves and crushed seeds, potato skins, parts of old garments, and occasionally a jack knife."¹

During the later years of cotton culture under slavery the short staple cotton was put up in square bales and covered with jute or hemp bagging. Nearly all of the large planters had their own gin houses and presses, and the preparation of the cotton for market thus being carried on directly under the supervision of the planter or his manager was probably more carefully attended to than it has been in later years when the competition of ginning establishments has resulted in a cheapening of the cost of ginning at the expense of the quality of the work done.² But the plantation presses did not sufficiently compress the bales for purposes of export, and on the cotton arriving at the port cities, the bales were still further compressed by steam compresses to about one-half their former size. "There is no sufficient reason," wrote Mr. Lyman, "why this neat and solid packing should not be done at the plantations, thus saving the planter an expense of from one to two dollars a bale, now incurred at the shipping ports."³ Even after this second compression, the American bales were sent to Liverpool in a less neat and solid package than those from the East Indies.⁴

The changes wrought in the political, economic and social conditions of the South by the development of means of transportation are even yet imperfectly understood, and consequently not fully appreciated even by historians. Many of these changes in methods of transportation are partly the cause and partly the effect of

¹ Seabrook, *Op. Cit.*, 30.

² "Handbook of South Carolina," 590.

³ Report of Commissioner of Agriculture, 1866, 204.

⁴ Lyman, *Loc. Cit.*, 204.

the spread of cotton culture. The early settlers in the back part of the Carolinas and Georgia were for the most part of Pennsylvania and Virginia stock. Between these people and the colonists of the low country "there were no ties of consanguinity, no identity of history, traditions or experience, no religious affinities, no personal acquaintance, no commercial relations."¹ Between the two sections there was very little intercourse previous to the Revolution. The middle region lay between them, a wilderness through which there were no roads practicable for wagons.² The trade of the colonists in the back country was therefore carried on almost entirely with northern cities, Philadelphia, Baltimore and Richmond. It is not improbable that the importance of Philadelphia as a cotton market previous to 1790, as is evidenced by the establishment of roller gins there, even before the Revolution,³ is due to the carriage thither of small quantities of cotton produced by these early settlers in the back portions of the Carolinas. But the spread of cotton culture after 1793 made these old routes of trade impracticable and rendered necessary the establishment of means of communication and transportation between the back country and the coast region. Facilities for water transportation were first developed, and this was the usual method of sending cotton to market during the first half of the present century. River towns such as Columbia, Cheraw, Camden, Hamburg, Augusta, Montgomery, Vicksburg, Natchez and Shreveport, were the chief markets for the inland cotton trade and the centres from which cotton was transported to the

¹ W. L. Trenholm, "Transportation in South Carolina," in "Handbook of South Carolina," 616.

² Trenholm, *Loc. Cit.*, 616.

³ Ellison, "A Centennial Sketch of the Cotton Trade of the United States," 15.

coast cities, Charleston, Savannah, Mobile and New Orleans. Even the sending of cotton direct from the plantations to market was often by boat. Many of the large plantations were along the rivers, thus affording them an easy access to market. "Besides these ordinary conveyances, several novel methods were employed of moving produce to market. It is said that cotton was sent to Hamburg from the country near the upper Savannah by throwing the bales into the stream and letting them float with the current."¹

In 1826 there were ten steamboats engaged in the cotton trade between Charleston and the towns of Savannah, Augusta, Hamburg, Georgetown, Cheraw and Columbia. These boats had an average capacity of six hundred bales of three hundred and twenty pounds each.² The usual method, however, of transporting cotton on the rivers was by means of flat boats. These boats were managed by a "patroon" and five hands. They carried usually about 110 bales of cotton. The freights, including insurance, amounted to \$1.00 per bale from Columbia or Camden to Charleston, and \$1.75 from Augusta or Hamburg to Charleston.³ Transportation in this way was necessarily slow and expensive. A writer in 1831 says: "The rich inhabitants of the back country of South Carolina and of those parts of North Carolina and Georgia which trade with Charleston, are obliged at great expense to transport their produce and receive in return their supplies; weeks and not infrequently months have elapsed before places, not more distant in a direct line than one hundred and twenty miles, could effect their communication, and then and at all times

¹ Trenholm, *Loc. Cit.*, 622.

² Mills, "Statistics of South Carolina," 428.

³ Trenholm, *Loc. Cit.*, 627.

with great expense and at no time without great risk of loss and great delay.

"The profits of the planter, or what ought to be his profits, are but too often consumed in the expense of transportation, and the merchant finds it impossible to calculate with that certainty which his operations require, the time he may expect arrivals or hear of his shipments having reached their points of destination."¹

Those planters who did not live along a navigable stream were usually compelled to haul their cotton over land by wagon to market. Even those who had the opportunity to make use of the rivers as highways of commerce, often preferred to send their cotton over land. Thus Mills tells us that, although the freight from Columbia to Charleston by way of the Congaree and Santee rivers was in 1821 only \$1.50 per bale, "this route was so long and hazardous that shippers preferred to send their cotton by wagons at a cost of \$3 per bale."²

The small planters often sold to dealers in the small towns who undertook to haul the cotton over the poor roads sometimes one hundred and fifty miles to where it could be sent by flat boats to cities on the coast.³

The era of railroad building began in the South with the construction of the Charleston and Hamburg railroad, which was begun in 1830 and completed in 1833. But although there was a gradual development of railroad building in the South between 1834 and 1860, progress in this direction was less rapid than in the North.⁴ In 1850 the southern states, including Virginia and Kentucky, had less miles of railway than were possessed

¹ Quoted by Trenholm, *Loc. Cit.*, 628. Cf. Von Halle, 112-113.

² "Telescopic Press," (pamphlet), p. 19, quoted Trenholm, *Loc. Cit.*, 638.

³ Russell, *Op. Cit.*, 292.

⁴ Cf. Von Halle, *Op. Cit.*, 114-15.

by the New England states, and in 1860, there were but 9,517 miles of railway in the southern states, as compared with 11,114 miles in the North Central states.¹

The railroads exercised an important influence on cotton growing, not only in the fact that they furnished cheaper and more rapid transportation for cotton, but that they created local markets, stimulated interior buying and facilitated the deportation of negroes from the coast to the interior. "The railroads stimulated the extension of cotton culture and made western provisions so cheap that the farmers neglected the production of food at home. By cheapening the transportation of corn and bacon to the cotton lands, and cheapening the carriage of cotton to the seaboard, an unaccustomed adjustment of prices came about, which led the farmers into that vicious semblance of economy of which the evil effects are still seen and felt throughout the states, whereby the independence and the substantial comforts of farm life are sacrificed to the pursuit of money returns from a large cotton crop."²

Although there were many attempts made by southern agriculturists and statisticians to determine what were the costs and profits of cotton raising, the results secured are not very satisfactory from a statistical point of view. Conditions of production varied not only according to the difference in locality, but within a single community they varied according to the size and management of the plantation. The large plantation with a superior organization of slave labor, produced at a less expense than did the small plantation adjoining. Difference in the fertility of the soil, in character of the seasons, in facilities for marketing will occur to any one at

¹ Preliminary Report of the Eighth Census (1860), 234-5.

² Trenholm, *Loc. Cit.*, 635. Cf. Von Halle, *Op. Cit.*, 115 (table).

first thought. Even on a single plantation it was difficult to estimate the average cost of raising cotton, if any other crops were cultivated, or to say what proportion of the expense was to be legitimately reckoned as costs of cotton raising. About 1840, when planters were becoming alarmed lest India should become a successful rival of the southern states as a cotton producing country, there was a meeting of the "most distinguished and intelligent planters" to take measures for counteracting these efforts which were being made by the East India Company. "It was then decided that so long as the American planters could get eight cents (4*d*) per lb. for their cotton, delivered at the nearest market, they could afford to produce it, but that if a supply from any other quarter could be obtained for less than that sum, they must then turn their attention to the cultivation of other commodities.¹

In 1849 several of the large planters on the Mississippi bottoms estimated that they could grow cotton for six cents a pound,² and planters writing for *De Bow's Review* declared that when they were obliged to raise cotton for five cents, the business was ruinous.³ The smaller planters must have had still higher prices if they found production profitable. Except during the decade between 1840 and 1850, cotton rarely sank below ten cents a pound on the New York and Liverpool markets, and this was deemed sufficient after deducting commissions and other marketing expenses, to enable the planter to make a profit. Ten cents seems, indeed to have been considered the golden mean of cotton

¹ Wheeler, "Madras vs. America," 99.

² Patent Office Report (Agriculture) 1849-50, 310-12.

³ This refers simply to the cost on the plantation, without counting the cost of marketing. De Bow, "Industrial Resources," 151, 163.

prices. If cotton sank below this figure its production became unprofitable; if it rose above ten cents, labor became "too dear to increase production rapidly."¹

¹ De Bow, "Industrial Resources," I: 175.

CHAPTER IV.

SOUTHERN AGRICULTURE SINCE THE CIVIL WAR.

A. Industrial Reconstruction.

The close of the Civil War found the agriculture of the South in a chaotic condition. The losses of property always incident to the invasion and occupation of a land by hostile armies, were not wanting, nor were they lacking in severity, but even these were insignificant when compared to those occasioned by the complete collapse of the industrial system of the defeated section. Slavery had been the foundation on which the industrial structure of the southern states had been reared, and it was inevitable that with its washing away, there should disappear the fortunes of all who had built upon it. But the decline of values was not measured by the loss of slaves alone. All kinds of property seemed to have been caught in the general ruin caused by the downfall of slavery, and if in the case of slaves the loss had been more complete, it was less diffused, for the number of slave holders had always been small in proportion to the total population.¹ The uncertainty of obtaining laborers to cultivate the fields caused the lands of the cotton states, which had been worth little enough before the war, to be thrown on the market in such quantities that their value became merely nominal, most of them being unsaleable at any price. The buildings on the plantations had been destroyed during the war, or had fallen into decay through want of repairs. Tools had been lost or broken; cattle had strayed away or been stolen,

¹ Cf. Von Halle, *Op. Cit.*, 261.

and on many plantations there was not food enough to last the owner and his former slaves until a new crop had been harvested. There was thus a lack of capital, not only for making the much needed repairs and improvements on the plantations, but even, in many cases, for resuming agricultural operations, and what was still a greater misfortune, there was no substantial basis for obtaining credit.

The one ray of hope which seemed left to the planters of the cotton belt came from the high prices which their staple was then bringing on both the European and American markets. The superior character of the American cotton had made its scarcity in Europe during war times severely felt, both in Lancashire and on the Continent, even after the importations from India and elsewhere had become great enough to supply the wants of the trade for cotton goods. The unsatisfactory character of the Indian cotton had caused great irritation to the spinners, and the reopening of the southern ports at the close of the war was hailed with joy throughout Europe. Prices of the American staple in Liverpool in 1865 averaged nearly 20 pence on the basis of "middling uplands," and the awakened demand for cotton promised to continue prices on this high level for some years to come.

Important as were these high prices to the planter in encouraging him to revive his agriculture, and to the freedman in furnishing him employment in an occupation in which he was in a certain sense a skilled laborer, they proved in some respects a misfortune to the South; for not only did they lead to a return to the old plantation method of farming, with its "one crop" system of cultivation, but the very stimulus which they gave to cotton growing led to over-production of that staple, and

caused an unexpected and rapid decline of prices. The planter who, without money or means of securing credit in any other manner, had been obliged to borrow money from the factors and had pledged his cotton crop in payment therefor, trusting in the high prices of this staple to remunerate him for the high interest charges on his loans, found with the fall in prices that the receipts from his cotton crop were not sufficient to clear him of his indebtedness to the factor, and he could only begin a new year by still further increasing his obligations to the money lender and promising to raise still more cotton to act as additional security. The high prices of cotton thus aided in establishing that credit system which has been the main feature of southern agriculture since the war, as slavery was previous thereto, and which has been the chief cause retarding the economic development of the cotton states and the betterment of their agriculture. Had the price of cotton been low in 1865-6, the revival of the farming industry of the South would doubtless have been less rapid, but it probably would have taken a different direction, leading to the production of larger food crops and a more moderate increase in the production of cotton, and would thus have prevented many farmers from falling into that state of peonage to factors and merchants in which the majority of the cotton growers are to-day to be found.

In attempting to adapt himself to the changed condition of affairs in 1865, the first question which confronted the land owner was how he should secure laborers for the cultivation of his estate. To farm this alone with only such assistance as he could obtain from members of his family was in most cases impossible. The average size of the farms in the cotton states was in 1860 four hundred acres, and although on most of the plan-

tations a considerable portion of the land was uncultivated, even the tillable portion demanded the assistance of outside labor. Nearly all of the planters would have been glad to sell a part of their land, but buyers were seldom found. Of the European emigrants who began to pour into the United States at the close of the Civil War, few found their way to the southern states.¹ The disorganized political conditions there existing, lingering prejudices against associating with the negroes, ignorance of the southern crops, the tendency of migration to follow isothermal lines, and the presence of friends in other sections of the country, all serve to explain why the new arrivals preferred the plains of the West and Northwest to the fertile lands and mild climate of the cotton belt.

A few northern men, whom military or political affairs had brought to the South, were induced by the cheapness of land and the high prices of cotton to purchase farms and to attempt the raising of this staple. But the ill success of their experiments, and the social ostracism which northern men encountered while the bitter feeling resulting from the war lasted, prevented any noticeable increase of land buyers from that section. Of the southern people themselves, those who had land wished to sell, and those who did not own land had neither money nor credit wherewith to buy. The breaking up of the large estates, which multiplied so rapidly the number of land holdings, did not begin until several years after the war, when the crop failures

¹ Of 3,300,356 immigrants landed at the port of New York from Aug. 1, 1855, to Dec. 31, 1873, only 23,599 announced their intention of settling in any of the ten cotton states. Mayo-Smith, "The Influence of Immigration on the United States of America," Bulletin de l'Institut International Statistique, Tome III, 2^{me} Livraison, 46-7.

had shown the impossibility of longer maintaining the old plantation system.

Unable to sell their lands, the planters first thought of hiring their old slaves and continuing the old system of farming in other respects unchanged. As few planters had money to pay their hands by the week or month, they sought to contract with the negroes for a year, payment to be made when the crop was harvested. In the meantime the laborer and his family were to be furnished with rations as in *ante-bellum* days. Through an investigation made by the United States Department of Agriculture¹ in 1867-8, the average annual wages paid to agricultural labor in the cotton states for the years 1867 and 1868, and the wages paid for hired labor in 1860 were found to be as follows:²

States.	1860.			1867.			1868.		
	Men.	Women.	Youth. ³	Men.	Women.	Youth.	Men.	Women.	Youth.
Virginia	\$105	\$ 46	\$39	\$102	\$ 43	\$46	\$102	\$41	\$45
North Carolina	110	49	50	104	45	47	89	41	39
South Carolina	103	55	43	100	55	43	93	52	42
Georgia	124	75	57	125	65	46	83	55	47
Florida	139	80	65	139	85	52	97	50	44
Alabama	138	89	66	117	71	52	87	50	40
Mississippi . . .	166	100	71	149	93	61	90	66	40
Louisiana	171	120	72	150	104	65	104	75	60
Texas	166	109	80	139	84	67	130	72	65
Arkansas	170	108	80	158	94	78	115	75	67
Tennessee . . .	121	63	60	136	67	65	109	51	45

¹ Although the statistical reports put out by the Federal and state departments of Agriculture, often cited in this chapter, are based on as reliable data as the times and resources of these bureaus have permitted them to secure, the reader is advised not to give them the same value as is assigned to census returns.

² Rations and clothing are included with these wages for 1860; rations without clothing for 1867 and 1868. The inflated character of the currency for the latter years would make the difference in real wages between 1860 and these years much greater than the above figures show.

³ Youth includes all children of both sexes over 14 years of age.

The wage system, although never universally adopted in the cotton belt, seems to have been the prevailing one for the first year or two immediately following the war. The results of these few years of experiment plainly showed that, although this system had some important advantages for southern agriculture,¹ its adoption under the then existing circumstances was premature. Neither to the freedman nor to the planter did it give satisfaction. The idea of waiting until the end of the year for his wages was displeasing to the negro, and in reality often proved an unsafe practice, for the planter working under the credit system often found that the returns from his crop were insufficient to remunerate the negro for his services, after the claim of the factor or the merchant had been satisfied. On the other hand, weekly or monthly payments, aside from the fact that they were often impossible to the planter, were thoroughly unsatisfactory to him, for once the negro had obtained his pay, nothing could induce him to return to the cotton fields until he had spent every cent of his earnings. Often he would refuse to hire his services for more than two days in the week.² Even when working for annual wages, this indisposition on the part of the negro to work steadily was the most serious drawback to the wage system. As a slave he had been accustomed to associate the idea of freedom with that of idleness, and the practice of his master had done much to confirm him in this opinion. The ease with which a bare subsistence could be obtained in the South rendered it difficult to divest the freedman's mind of this idea. "To be free was to hunt and fish and

¹ Cf. Loring and Atkinson, "Cotton Culture and the South, Considered with Reference to Immigration" (1869), p. 28-30.

² Report of the U. S. Commissioner of Agriculture, (1866), 573.

lounge about the country town ; to the women it was to desert outdoor employment, and ape in a slight degree the fashions and habits of the more fortunate white race."¹

The tendency of the blacks to collect in large masses for social, political or religious purposes made itself strongly felt during these early years of freedom, and this natural inclination was greatly strengthened by the efforts made by the "carpet-bag" politicians from the North to capture the negro vote. Threats of re-enslavement, and extravagant promises were made by these political free-booters to draw the freedmen away from the influence of their old masters and secure their aid in furthering their own selfish plans. In order to attend political meetings, the negro would often desert the corn or cotton fields when they most needed attention, and many crops, even after a successful cultivation, were left ungathered for want of laborers to harvest them. The cotton crop actually harvested in 1866 was probably less than a million bales, and the commercial crop of 1866-7 was hardly more than two million bales. The loss occasioned by these failures was thrown entirely upon the planters who had furnished the laborers with their subsistence during the making of the crop, and when the negro broke his contract before harvest, these planters were left without any return for this outlay.

For these reasons the wage system was usually abandoned after the first year's trial,² and those planters who continued it did so with greatly reduced wages, as can be seen by a reference to the above table. Throughout the cotton belt, wages for full hands (men) showed a de-

¹ Report of the U. S. Commissioner of Agriculture, (1867), p. 421.

² *Ibid.*, p. 416.

crease of nearly 25 per cent. in 1868 from those paid in 1867.

The necessity for breaking up the old plantation system now became more and more urgent. The decline in land values had steadily continued since the close of the war. The crop failures and the decline in the price of cotton had compelled planters who were unable to meet their obligations to their factors, to throw their land upon the market. "Plantations that had brought from \$100,000 to \$150,000 before the war, and even since, were sold at \$6,000 or \$10,000, or hung on the hands of the planter and his factor at any price. The ruin seemed to be universal and complete, and the old plantation system, it then seemed, had perished utterly and forever."¹

The total value of the farming lands, including fences and buildings, in the ten cotton states declined from \$1,478,947,832 in 1860, to \$764,121,662 in 1870, a fall of more than 48 per cent. In the leading cotton states, especially those with the largest negro populations, the decline in value was the greatest, being as high as 67 per cent. in Louisiana.² Attracted by the low prices to which land had fallen, there now came a class of small buyers, not from the North or Europe, whence the planters had hoped to attract purchasers, nor from amongst the freedmen, who, though anxious to become land owners, seldom rose to this rank in the decade following the war. The purchasers who came to relieve the planters from their landed burdens came from one of the least expected sources, from out of that class of "poor whites" whose lack of ambition and wretched poverty had been a result of the disgrace connected with

¹ Henry W. Grady in *Harpers' Magazine*, LXIII: 721.

² Census returns of 1860 and 1870.

first thought. Even on a single plantation it was difficult to estimate the average cost of raising cotton, if any other crops were cultivated, or to say what proportion of the expense was to be legitimately reckoned as costs of cotton raising. About 1840, when planters were becoming alarmed lest India should become a successful rival of the southern states as a cotton producing country, there was a meeting of the "most distinguished and intelligent planters" to take measures for counteracting these efforts which were being made by the East India Company. "It was then decided that so long as the American planters could get eight cents (4*d*) per lb. for their cotton, delivered at the nearest market, they could afford to produce it, but that if a supply from any other quarter could be obtained for less than that sum, they must then turn their attention to the cultivation of other commodities.¹

In 1849 several of the large planters on the Mississippi bottoms estimated that they could grow cotton for six cents a pound,² and planters writing for *De Bow's Review* declared that when they were obliged to raise cotton for five cents, the business was ruinous.³ The smaller planters must have had still higher prices if they found production profitable. Except during the decade between 1840 and 1850, cotton rarely sank below ten cents a pound on the New York and Liverpool markets, and this was deemed sufficient after deducting commissions and other marketing expenses, to enable the planter to make a profit. Ten cents seems, indeed to have been considered the golden mean of cotton

¹ Wheeler, "Madras vs. America," 99.

² Patent Office Report (Agriculture) 1849-50, 310-12.

³ This refers simply to the cost on the plantation, without counting the cost of marketing. De Bow, "Industrial Resources," 151, 163.

prices. If cotton sank below this figure its production became unprofitable; if it rose above ten cents, labor became "too dear to increase production rapidly."¹

¹ De Bow, "Industrial Resources," I: 175.

labor during slavery days. The mania for cotton growing which, in spite of the repeated failures, seemed to have seized hold on the people of the South, and the willingness of the planters to sell on any terms, and of the merchants to give credit on the prospective cotton crops, awakened in these poorer classes the desire to better their condition, and induced them to purchase the lands which the owners were so willing to sell. "Never perhaps," wrote Henry W. Grady,¹ "was there a rural movement, accomplished without revolution or exodus, that equaled in extent or swiftness the partition of the plantations of the ex-slave holders into small farms. As remarkable as was the eagerness of the negroes—who bought in Georgia alone 6,850 farms in three years—the earth hunger of the poor classes of the whites, who had been unable under the slave holding oligarchy to own land, was even more striking. In Mississippi there were in 1867 but 412 farms of less than ten acres, and in 1870, 11,003; only 2,314 of over ten and less than twenty acres, and in 1870, 38,015. There was thus in this one state a gain of nearly forty thousand small farms of less than one hundred (?) acres in about three years. In Georgia the number of small farms sliced off the big plantations from 1868 to 1873 was 38,824. In Liberty county there were in 1866 only three farms of less than ten acres, in 1870 there were 616, and 749 farms between ten and twenty acres."

The increase in small farms as shown by a comparison of the number and average size of land holdings in the South in 1860 and 1870, was general throughout the entire cotton belt, and was therefore in marked contrast with the condition of affairs during the decade 1850–60, when the average size of farms in the western states

¹ *Harpers' Magazine*, LXIII: 721–2.

had increased. Between 1860 and 1870 the average size of farms in the cotton belt decreased from 401.7 acres to 229.8. The extent and importance of this agrarian movement is best seen, however, by comparing the number of farms in each of several classes for the two decennial years, as in the following table.¹

NUMBER AND SIZE OF FARMS IN 1860 AND 1870.

States.	Less Than 100 Acres.		Per Cent. of Increase.	100 to 500 Acres.		500 to 1,000 Acres.		1,000 or more Acres.		Average Size of Farms.			
	1860.	1870.		1860.	1870.	1860.	1870.	1860.	1870.	1850.	1860.	1870.	1870.
Alabama . .	38,961	54,208	39	13,455	11,719	2,016	1,149	696	306	289	346	222	
Arkansas . .	34,397	45,793	33	4,231	3,465	307	133	69	33	146	245	154	
Florida . . .	4,848	8,424	74	1,432	1,570	211	175	77	72	371	444	232	
Georgia . . .	39,588	50,541	27	18,821	17,490	2,692	1,506	902	419	441	430	338	
Louisiana . .	10,841	23,936	120	4,955	3,753	1,161	650	371	142	372	536	247	
Mississippi .	35,083	57,999	65	11,408	8,938	1,868	853	481	233	309	370	193	
N. Carolina .	54,468	78,741	44	19,220	13,819	1,184	889	311	116	369	316	212	
S. Carolina .	19,961	44,183	121	11,369	7,112	1,359	465	482	129	541	488	233	
Tennessee . .	59,386	98,873	66	21,903	18,806	921	412	158	50	261	251	166	
Texas	35,505	54,480	53	6,831	6,268	468	305	87	72	942	581	301	
Total . . .	333,058	517,178	55	113,625	92,940	12,187	6,537	3,634	1,572	404.1	401.7	229.8	

The elevation of the poorer class of whites in the South to the rank of peasant proprietors, produced a remarkable increase in the proportion of whites employed in the cultivation of cotton. Partly from choice, but principally from necessity, as we shall see when we come to discuss the influence of the credit system on cotton growing, these small land owners devoted their energies principally to cotton raising. Previous to 1860 it is supposed that the proportion of whites to blacks in the cotton fields was about one to eight,² and it was generally held that the culture of cotton was unsuited to white labor. By 1876 nearly forty per cent. of the laborers engaged in the cultivation of cotton were whites, and in

¹ Compiled from census returns.

² De Bow, "Industrial Resources," I: 175; *De Bow's Review*, XVIII: 154; Von Halle, 355.

all workers. After the failure of the wage system, which, as we have already mentioned, the planter used to determine a series of means of making the negro answer responsible for at least a part of the work performed by his own slaves. Under the wage system the planter had dismissed the negro with his emancipation, or he had not perhaps advanced a part of his wages when he had not been entirely satisfied for satisfactory working the crop completed and the planter is returned to his estate.

The first general plan which ran through the planter class and came out of various localities, was that the negro should be given some interest in the crop, as well as that a freedman in the upper pine belt of South Carolina became possessed of the idea that the negro in the quarter should be one-fourth of the produce, to determine his own food and shelter.¹ The plan that he proposed was that he should work five days of the week for the planter, and in return should be furnished with food and fuel, three acres of land and a mule to work three Saturdays, and in addition should be given fifty cents. This plan, with modifications the following years by which the freedmen worked four, three and even two days for the planter, became a widespread method in this part of South Carolina.²

"This may serve as an illustration," says Major Harry Hamersley, "of the instinctive processes by which these people intuitively the most complicated problems and doctrines in the great questions as to the newly just emancipated, they at once out of the old world seem to be centuries since the abolition of slavery in Carolina." 83.

¹ *Ibid.*

Throughout the greater part of the cotton belt, however, the share system seems to have taken the direction of giving the laborer, not a portion of the land to cultivate, but a share of the crop which he raised for the planter. The negro tenant who furnished his own tools, seed and mules, usually received two-thirds of the crop, sometimes three-fourths of the cotton. It was not often, however, that the negro was able to furnish the capital, and when he supplied only his own rations and had a house and garden and all the work animals and implements for cultivating the land furnished him, he seldom received more than one-half the crop. While the "cropping system" had the advantage over the wage system of stimulating the industry of the negroes through the interest which it gave them in the crop, and therefore diminished the loss which the planter would suffer from the negro breaking his contract, or from a failure of the crop or a decline in its value, it had the misfortune of weakening the planter's interest, and caused a lack of oversight and superintendence of the work. The tenant who was interested only in making a big crop usually neglected, under the "cropping system", to keep the land in good condition. This weakness of the share-system has become more evident as the years go by, and shows that while the system was perhaps a necessary step in the re-organization of southern agricultural economy, it was suited only to a transitional state, as a permanent arrangement is inferior to

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the extent of the cotton area in 1860 as twelve or thirteen million acres. The number of acres planted in cotton during the years immediately following the war was doubtless small in comparison with those immediately preceding, while the average production was still more affected both by the absence and inefficiency of the laborers. From local returns submitted to the United States Bureau of Agriculture in 1867, it was estimated that the average production for that year was about 190 pounds lint cotton per acre, and 1,750 per hand.¹ Judging from the more accurate returns of later years, this estimate, especially as touching the yield per acre, seems too large. It is doubtless true, however, that the yield of cotton per acre has increased since the war.² In 1870-71, when we have our first estimate put forth by the Agricultural Bureau of the number of acres cultivated in this plant, the crop raised on the estimated 8,666,217 acres was 1,924,000,000 pounds, as compared to 2,247,000,000 pounds raised on the supposed twelve or thirteen million acres in 1859-60. This would be a yield per acre of 222 pounds in 1870-71, as compared to one of 172 to 187 pounds in 1860.

While the increase in acreage which continued with slight interruptions after 1870, was due largely to the taking in of new lands west of the Mississippi, especially in Texas where cotton growing had only become fairly established at the outbreak of the war, there was also a noticeable increase in the cotton area in the older states, particularly in the Carolinas and Georgia. There was also an increase in the yield per acre in the older states,

¹ Report of U. S. Commissioner of Agriculture, (1867), 415.

² See table, "Average annual yield per acre of cotton in different states, (1874-1894)," in H. Hammond's "The Culture of Cotton," *Loc. Cit.*, 269.

and particularly in those portions of the cotton belt where white labor was engaged in the cultivation of this staple. The increase in acreage and yield in some of the older states was sufficient to raise their proportion of the crops grown, in spite of the fact that the center of cotton production was moving westward. Thus North Carolina, which in 1849 had produced but 2.9 per cent. of the entire crop, and in 1859, 2.7 per cent., in 1869 produced 4.8, and in 1876, 4.7 per cent. of the total crop. South Carolina raised her production from 6.4 in 1859 to 7.4 in 1869, and 7 per cent. in 1876. Alabama, Mississippi and Louisiana showed a decrease in their proportion of the crops grown.

The cause for the extraordinary increase in the acreage and yield in the older states, though partly to be explained by more intelligent cultivation, especially on the part of the small farmers, was principally due to the use of commercial fertilizers. Not only was the yield of cotton per acre thus increased, but the maturity of the plant was hastened, and this permitted the extension of cotton growing to regions where it was formerly unprofitable. "In North Carolina alone," wrote Mr. Grady, "the limit of cotton production has been moved twenty miles northward and seventy miles westward, and half of Georgia, on which no cotton was grown twenty years ago, now (1881), produces fully half of the crop. The area of low production as the Atlantic states are brought to the front by artificial stimulation is moving westward, and is now central in Alabama and Florida."¹ It was only during the decade preceding the war that the value of the deposits of marl and phosphates in the Atlantic states began to be appreciated. In the years following the war a perfect mania for the use of these natural re-

¹ Henry W. Grady, *Harpers' Magazine*, LXIII : 720.

sources for fertilizing the cotton lands seized hold of the people of the Carolinas and Georgia. From an investigation made in 1876, it was learned that the proportion of the cultivated area fertilized was in North Carolina, 35 per cent., in South Carolina, 60 per cent., and in Georgia, 42 per cent. In Florida, Alabama and Mississippi from ten to fifteen per cent. of the land was fertilized, chiefly through a return of the cotton seed to the soil, while in Tennessee and west of the Mississippi the percentage of the land fertilized was too small to be appreciable.¹ The need of the land in the Atlantic states for fertilization was unquestionably great, and the utilizing of the long neglected phosphate rock for this purpose was certainly a piece of wisdom.² But the use of commercial fertilizers was often far from judicious. Instead of using these guanos and phosphates to supplement stable manures in bringing up the fertility of the land as well as for increasing production, the farmers were led by the high prices of cotton to neglect the stable manures altogether, to plant every acre possible in cotton, and to distribute their high-priced commercial fertilizers in such a way as to raise big crops of cotton, while the land received little benefit therefrom.

The rapid decline in the price of cotton from 43 cents in 1866, to 17 cents in 1871,³ made the expense for commercial fertilizers a severe burden, and increased the indebtedness of many of the farmers, and their dependence on the merchants.⁴ As is always the case

¹ Report of U. S. Commissioner of Agriculture, (1876), 123.

² "Considering the condition of the land and the labor system of the cotton states at the close of the Civil War, it is difficult to conceive how cotton culture could have been continued or sustained, but for the use of such manures." H. C. White, "The Manuring of Cotton," in "The Cotton Plant," 173.

³ Average New York prices.

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where a sudden demand is created for any commodity, great quantities of worthless and fraudulent fertilizers were thrown upon the market, and largely purchased, until the various states provided for an inspection and analysis of the commercial fertilizers, and prohibited the sale of the undesirable brands. By the publication of these chemical analyses, and the results of the experiments with the various makes by the state experiment stations, the people were led to use greater discrimination in their purchases, and to make a more economical use of those they did buy, by composting them with the stable manures. In Georgia, the Commissioner of Agriculture reported the inspection of 48,648 tons of commercial fertilizers, costing \$2,481,048, an average of \$51 per ton, for the year 1874; and 56,596 tons, costing \$2,640,203, an average of \$46.64 per ton, for the year 1875. Nearly half the fertilizers in the latter year were so composted as to yield for every ton of commercial fertilizer, four tons of compost deemed to be of equal value with the uncomposted fertilizer.¹

In the western states where many of the farms were still so large as to make fertilizing almost impracticable, the practice of fallowing was resorted to to a limited extent, and with good results.²

Next to the increased use of fertilizers, perhaps the most gratifying change for bettering the agriculture of the cotton states, was the increased attention given to other crops than cotton. The change was not great, and was far from universal, showing itself principally in new communities where the force of custom was less operative, the number of immigrants larger and where cotton speculation had not become a mania with the people.

¹ Report of the U. S. Commissioner of Agriculture, (1876), 123.

² *Ibid.*

The change indicated little progress so far as a rotation of crops was concerned, being principally evidenced in an increase of the corn area, at the expense of cotton growing, but it indicated a disposition on the part of some farmers to raise their own provisions rather than to depend on the northern and western states for their meal and bacon. Cotton was supposed to have occupied 44 per cent. of the tillable area of the cotton states in 1860; Indian corn, 38 per cent., and other crops 18 per cent. In 1876 35 per cent. of the cultivated land in these states was supposed to be given over to cotton, 41 per cent. to corn, and 24 per cent. to other crops.¹ On many plantations almost the whole cultivated surface was given over to cotton, and every mouthful of food was purchased from other sections.

There were few improvements in the mode of cultivating the cotton lands to be noticed during the twelve or fifteen years following emancipation. The decrease in the size of the farms and the increase in the amount of intelligent labor should lead us to expect an increase of intensive cultivation, the use of better farm implements, an increase in the number of crops grown, leading to a useful system of rotation; the keeping of more live stock, and the preservation and use of stable manures; but there were few of these improvements to be noted even as late as 1880. There seemed to be in some localities an increase in deeper plowing before planting, and more shallow cultivation afterwards. About fifteen per cent. of the farmers were said to practice subsoiling,² and in the hill country of South Carolina and Georgia the white farmers had begun to endeavor to prevent the washing of their lands by drains

¹ Report of the U. S. Commissioner of Agriculture, (1876), 121.

² *Ibid.*, 127-8.

or "ring cultivation." There had been little increase in the number and kind of farming implements used, unless the more extensive use of cotton planters be considered. One of the chief purposes which prompted the holding of the Atlanta Exposition in 1881, was to furnish the southern farmer an opportunity to become acquainted with the best class of agricultural implements. Mr. Grady wrote this year, that "the farms are littered with ill adapted and inferior implements and machines, representing twice the investment that, intelligently placed, would provide an implement that with half the labor would do better work."¹ If we except the herds of cattle grazing on the plains of Texas, we find that there was less live stock in the cotton states in 1880 than in 1860. The lack of attention given to a rotation of crops, and the failure of most of the farmers to save and use stable manures, we have already mentioned.

There was much to excuse the planters and their tenants for this failure to adopt new and better methods of cultivation. The negroes were accustomed to the old routine of cotton planting, and were not apt in learning new practices. The lack of capital in the South; the discouragements of the old planters, who had spent the best years of their life in accumulating slave property; the failure of the greater part of the cotton belt to attract immigrants; the still plentiful supply of new lands which could be taken into cultivation when the old ones had become exhausted, and the force of custom, always strong in old communities, driving the sons to plant and cultivate as the fathers had done, made the adoption of new methods of farming slow and difficult. A still greater hindrance to the improvement of the farming system of the cotton belt was the credit system which

¹ *Harpers' Magazine*, LXIII : 732.

some states the whites in the cotton fields outnumbered the blacks. The percentage of each class in the ten cotton states is shown in the following table :¹

States.	Blacks.	Whites.
North Carolina	65	35
South Carolina	68	32
Georgia	66	34
Florida	72	28
Alabama	59	41
Mississippi	68	32
Louisiana	77	23
Texas	38	62
Arkansas	40	60
Tennessee	59	41
Average for the ten states	61.1	38.9

As remarkable as was the increase of land holdings in the South during the decade following the war, the negroes had participated to but a slight extent in this agrarian movement. As late as 1876 the Bureau of Agriculture at Washington found as the result of an investigation that only about five per cent. of the freedmen in the cotton states had become owners of land, the percentage being highest in Florida with eight per cent, and lowest in Alabama and Tennessee with four per cent.² Efforts had been made by many planters to induce the negroes to purchase land, the plantations being divided with this end in view into small strips large enough to be cultivated by a single family. These the freedmen were encouraged to buy, payment to be made usually in four or five annual installments, which could be paid in money or kind at the option of the purchaser. In spite of these favorable conditions to purchasers, the plan seldom met with the success hoped for. The negro was pleased, it is true,

¹ Report of U. S. Commissioner of Agriculture, (1876), 136.

² *Ibid.*, 137.

with the idea of becoming a land owner, and he entered enthusiastically into the scheme, but his enthusiasm, it is to be feared, was largely because of the prospect of his becoming master of his own time, free to work or remain idle as he saw fit. The result was that he made perhaps one or two payments on his purchase and then, either because of a bad season or more probably because of his own neglect, he failed to make a crop large enough to pay for the advances which had been made to him by the merchant, to say nothing of keeping up the annual payment on the land. A few of the more industrious negroes, who were aided by the indulgence of the planters in extending their time, became land owners in this way, but as a rule one success of this kind was accompanied by a dozen failures.

Another plan which was tried in many localities after the wage system had proven a failure, was the renting of the land for cash rents. This was, however, not a widespread practice during the early *post-bellum* years. It had its best results in those portions of the South with large white populations. The tenant under this system furnished the tools, seed and cattle, as well as his own rations, raised such crops as he saw fit and cultivated them after his own fashion. The rental price of land varied, of course, according to the quality and location of the land, but was always high when compared with the selling value of the land. In one county in Tennessee it was reported in 1867 that the number of farms rented was in excess of that farmed on shares.¹

The system which soon became the all but universal method of farming the cotton lands by negro labor, was the "share system," more commonly known in the South

¹ Report of U. S. Commissioner of Agriculture, (1867), 417.

as the "cropping system." The many and various forms under which this system has appeared make it difficult to give a general description of it which would apply to all localities. After the failure of the wage system from causes we have already mentioned, the planter found it necessary to devise some means of making the negro laborer responsible for at least a part of the losses occasioned by his own idleness. Under the wage system the planter had furnished the negro with his subsistence for the year, and perhaps advanced a part of his wages, when the latter had often suddenly deserted the plantation, leaving the crop unpicked and the planter no returns for his outlay.

The one general idea which ran through the plans that now found favor in various localities, was that the laborer should be given some interest in the crop. As early as 1866, a freedman in the upper pine belt of South Carolina became possessed of the idea that the share of the laborer should be one-fourth of the produce, in addition to his own food and shelter.¹ The plan that he proposed was that he should work five days of the week for the planter, and in return should be furnished with his house and food, three acres of land and a mule to work it on Saturdays, and in addition should be given \$16 a year. This plan, with modifications the following years by which the freedmen worked four, three and even two days for the planter, became a widespread method in this part of South Carolina.²

¹ "This may serve as an illustration," says Major Harry Hammond, "of the instinctive processes by which these people seem to grasp intuitively the most complicated problems and the most advanced doctrines in the great questions as to the remuneration of labor. Only just emancipated, they at once take ground to which the laborers of the old world seem to have been struggling up through all the centuries since the abolition of serfdom." *Handbook of South Carolina*, 83.

² *Ibid.*

Throughout the greater part of the cotton belt, however, the share system seems to have taken the direction of giving the laborer, not a portion of the land to cultivate, but a share of the crop which he raised for the planter. The negro tenant who furnished his own tools, seed and mules, usually received two-thirds of the crop, sometimes three-fourths of the cotton. It was not often, however, that the negro was able to furnish the capital, and when he supplied only his own rations and had a house and garden and all the work animals and implements for cultivating the land furnished him, he seldom received more than one-half the crop. While the "cropping system" had the advantage over the wage system of stimulating the industry of the negroes through the interest which it gave them in the crop, and therefore diminished the loss which the planter would suffer from the negro breaking his contract, or from a failure of the crop or a decline in its value, it had the misfortune of weakening the planter's interest, and caused a lack of oversight and superintendence of the work. The tenant who was interested only in making a big crop usually neglected, under the "cropping system", to keep the land in good condition. This weakness of the share-system has become more evident as the years go by, and shows that while the system was perhaps a necessary step in the re-organization of southern agricultural economy, it was suited only to a transitional stage, and as a permanent arrangement is inferior to the wage system.

After the discouraging efforts of the first few years to grow cotton, the acreage and production of this staple rapidly increased. There are no reliable statistics giving the number of acres planted in cotton prior to 1870, but the estimates made since the war usually give

the extent of the cotton area in 1860 as twelve or thirteen million acres. The number of acres planted in cotton during the years immediately following the war was doubtless small in comparison with those immediately preceding, while the average production was still more affected both by the absence and inefficiency of the laborers. From local returns submitted to the United States Bureau of Agriculture in 1867, it was estimated that the average production for that year was about 190 pounds lint cotton per acre, and 1,750 per hand.¹ Judging from the more accurate returns of later years, this estimate, especially as touching the yield per acre, seems too large. It is doubtless true, however, that the yield of cotton per acre has increased since the war.² In 1870-71, when we have our first estimate put forth by the Agricultural Bureau of the number of acres cultivated in this plant, the crop raised on the estimated 8,666,217 acres was 1,924,000,000 pounds, as compared to 2,247,000,000 pounds raised on the supposed twelve or thirteen million acres in 1859-60. This would be a yield per acre of 222 pounds in 1870-71, as compared to one of 172 to 187 pounds in 1860.

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The change indicated little progress so far as a rotation of crops was concerned, being principally evidenced in an increase of the corn area, at the expense of cotton growing, but it indicated a disposition on the part of some farmers to raise their own provisions rather than to depend on the northern and western states for their meal and bacon. Cotton was supposed to have occupied 44 per cent. of the tillable area of the cotton states in 1860; Indian corn, 38 per cent., and other crops 18 per cent. In 1876 35 per cent. of the cultivated land in these states was supposed to be given over to cotton, 41 per cent. to corn, and 24 per cent. to other crops.¹ On many plantations almost the whole cultivated surface was given over to cotton, and every mouthful of food was purchased from other sections.

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There was much to excuse the planters and their tenants for this failure to adopt new and better methods of cultivation. The negroes were accustomed to the old routine of cotton planting, and were not apt in learning new practices. The lack of capital in the South; the discouragements of the old planters, who had spent the best years of their life in accumulating slave property; the failure of the greater part of the cotton belt to attract immigrants; the still plentiful supply of new lands which could be taken into cultivation when the old ones had become exhausted, and the force of custom, always strong in old communities, driving the sons to plant and cultivate as the fathers had done, made the adoption of new methods of farming slow and difficult. A still greater hindrance to the improvement of the farming system of the cotton belt was the credit system which

¹ *Harpers' Magazine*, LXIII : 732.

had arisen, and which gave to merchants the power of deciding what crops should be planted, regardless of their effects upon the land, or their value to the producer. The influence which this credit system has exercised on the later development of southern agriculture makes it necessary to devote some especial attention to this unique feature of southern agrarian history.

CHAPTER V.

SOUTHERN AGRICULTURE SINCE THE CIVIL WAR.

(Continued).

B. The System of Agricultural Credit.

Crop liens are no new feature in the agricultural credit system of the southern states. The preceding pages have made us familiar with the practice prevalent in the cotton belt previous to 1860, whereby the planter who desired to secure a short time loan resorted to one of the cotton factors living in one of the principal market towns of the South, and secured from him the desired funds. As a guarantee of repayment the planter was accustomed to pledge to the factor his cotton crop then growing, or about to be planted. The wealth and well known business standing of the large planters who alone obtained advances in this way, made the risk which the factors ran from a failure of the borrowers to fulfil the terms of their contracts a very small one. Loans were seldom made to a greater extent than ten dollars a bale on the crop which it seemed probable would be harvested. In addition to the charges for interest which, while high, were usually not exorbitant, the factor secured the handling of the planter's entire crop, the commissions which he charged for this service making the business a very lucrative one.

The poverty of the cotton growers at the close of the war, and the urgent necessity which drove most of the planters to borrow money or supplies, compelled a return to the old system of crop liens wherever it was possible under the changed conditions to do so. Many

of the factors had been ruined by the blockade, or by their inability to collect their outstanding loans to the planters. Yet the high prices which cotton brought during the early years succeeding the war made traders as well as planters anxious to profit by the revival of the trade in this staple, and those factors whose business had survived the war disasters were usually willing to resume operations by again making advances upon the prospective cotton crops of their debtors. When the factors themselves lacked the funds for making these loans, they secured advances from the commission houses of the North or in Europe. It was of course impossible under the changed circumstances of the borrowers to give credit on such favorable terms as were customary previous to 1860. There were no longer slaves to stand as the planter's security, and the land was worth so little that factors accepted it as a pledge only when crops and personal property proved insufficient guarantees of payment. The additional risks had in every case to be met by higher interest rates and the pledge of more cotton for security. For the planter there was no choice. He was glad to accept the credit on even these disadvantageous terms, trusting in the high prices of cotton to relieve him of his indebtedness and still allow him to profit by the transaction.

In order to facilitate the obtaining of credit by the planters, the legislatures of nearly all the cotton states had in the years immediately after the war passed the so-called "lien laws," which permitted the planters to mortgage their growing or unplanted crops, and gave to the factors or others who advanced supplies on these crops the first claim on them when they were harvested. The action of the legislatures in enacting these "lien laws" has been the subject of much criticism by many

writers on southern agriculture, who are inclined to make these laws responsible for the disasters which have overtaken many cotton growers who have under the credit system of the South become helplessly dependent upon factors and merchants for their food and the necessities of life.¹ It is doubtless true that these "lien laws" have contributed somewhat to the fostering of that spirit of indifference and careless management characteristic of many farmers in the South, who through natural indolence or want of foresight have not emancipated themselves from the money lender, even when able to do so. The freedmen especially have taken advantage of the privilege afforded by these laws to live off their future crops, and to spend the surplus remaining to them from the crop just harvested, in idle extravagance. And yet these "lien laws" must not be judged entirely by the abuses of the privileges which they have conferred, by the more thriftless and indolent portion of the farming community. It is difficult to see in what other way the farmer could have obtained credit at a time when it was most needed, if he could not have mortgaged his crops as security for his loans. There was no other property which he could offer as security. And as a matter of fact, the "lien laws" are not responsible for the introduction of the existing system of agricultural credit in the southern states. As we have already seen, and as one of the critics of the "lien laws" has himself remarked, "before the lien laws were enacted, and before they were used as a basis of credit, thousands of farmers in every southern state had already largely increased their debt obligations to merchants."² Instead, there-

¹ See Nordhoff, "The Cotton States in the Spring and Summer of 1875," 109; Otken, "Ills of the South," 35 ff.

² Otken, "Ills of the South," 38.

fore, of establishing the credit system in the South, the "lien laws" only legalized a system already prevalent and necessary, because it furnished the only means which the majority of the planters had of obtaining loans. By the legal protection which these laws furnished the money lender, credit was made possible on much easier terms than would otherwise have been the case.

For several years following the close of the Civil War, the factors at the ports or principal market towns of the South, continued to be the chief reliance of the cotton growers who were compelled to borrow money to carry on their planting industry. Custom and the existing methods of communication and transportation, combined to make the port cities the natural markets for the cotton, and these factors the natural intermediaries between the commission merchants and money lenders of Europe and the North and the cotton planters of the southern states. But with the decline in the price of cotton came the break-down of the old plantation system already mentioned, carrying with it often the ruin of the planters and the factors who had risked too much money in the hope of higher prices. The large planters gave way in many instances to the small farmers cultivating from ten to one hundred acres with only the help of their families. The hired laborers became tenant farmers dividing with the land owner the produce from their small holdings, and henceforth responsible for their own maintenance and direction. Under these circumstances a change in the credit system became necessary. The tenant farmers and small land holders stood as much in need of credit as the large planters, but obviously the extent of their undertakings and their business standing was not such as to make it

desirable for money lenders at some port city, perhaps hundred of miles away, to advance them money or supplies, taking only a mortgage on their crop as security for the loan. It became necessary for these small farmers to obtain local credit from some person whose residence in the community and acquaintance with the business habits and financial standing of his neighbors made possible the assumption of such risks as were involved in making loans to these small borrowers. About the same time that the increase of small farms and tenant holdings resulted in the collapse of the old plantation system of agriculture, there came, with the opening up of new methods of communication and transportation, an extension of that system of interior buying which has been described elsewhere in this essay.¹ This resulted in taking the marketing of the cotton crop largely out of the hands of the factors at the ports, and giving this business over to the merchant of the inland cities and towns, and even to the country storekeepers situated at the small railway stations throughout the South. It was the merchants now who also assumed the business of making loans or advances on the growing crops. Where the factors have continued to share in this loan business they have done so largely through the agency of the country merchants.

From his position in the community as the buyer of the farmer's produce, and the seller of all that the farmer purchases, the southern merchant is well prepared to judge of the honesty, promptness and business capacity of his customers. He better than anyone else knows to what extent he can trust this or that borrower, and he is better able than any one else to watch

¹ Book II, Chapter X.

suspicious or careless debtors. Under the rule of the merchant lender, the character of the loans has also changed. Factors were accustomed to make loans to the large planters in money, for the use of which they charged a specific rate of interest. Merchants, on the contrary, seldom make loans of money to their customers. The advances come in the form of articles of food, especially corn and bacon, in wearing apparel, furniture, crockery, agricultural implements,—in short everything purchased by the farmer which the merchant has to sell. Instead of charging fixed rates of interest on the amount of these loans, the merchant seeks remuneration for these advances by charging higher prices for the goods thus sold on credit than when he sells for cash. The loans do not run for a definitely stated time, but it is understood that payment is to be made as fast as the crop is harvested. In order to secure the repayment of these loans, it is customary throughout almost every county in the cotton belt for the advancing merchant to take out a regularly recorded mortgage on the crops of his credit customers. It occasionally happens that in a community where the virtue of strict integrity is well diffused, the merchant may not require this mortgage on the crop, but relies on the honor of such customers as he sells to on credit to meet their obligations when due.

But the crop mortgage is so often required and given that it may be considered as the all but universal method of securing loans made by the advancing merchants in the cotton belt. Sometimes the mortgage is given only on the cotton crop, sometimes on the cotton and corn, and sometimes on all that the planter raises, and if this is deemed insufficient security, the mortgage is made also to cover the mules, household goods and other chattels

of the would-be credit purchaser, and lastly, if all these are still considered not to be equivalent in value to the contemplated purchases, the real estate of the farmer is also pledged in repayment. It has frequently happened during the era of low prices which have prevailed in the last few years, that tenant farmers were unable to secure advances from the merchants until the land owner signed over his right to his share of the tenant's crop, should the "cropper's" own portion prove insufficient to meet in full the obligations which he had incurred to the advancing merchant.

To show the firm hold which the merchant secures upon the farmer when the latter has once become his debtor for supplies, the essential portion of one of these mortgage instruments, omitting the usual certificate forms for the witnesses, notary and judge of probate, is herewith given :

STATE OF ALABAMA, }
MONTGOMERY COUNTY. }

\$ Ala., 189 . . .

On or before the . . . day of 189 promise to pay or order, the sum of dollars, which sum was advanced to . . . by said in Horses, Mules, Oxen, Necessary Provisions, Farming Tools and Implements or money to purchase the same, to enable to make a crop during the year 189 . . in county, and we hereby declare that the said advances were obtained by bona fida for the purpose of making a crop, and that without such advances it would not be in power to procure the necessary teams, provisions and farming implements to make a crop. And further waive all exemptions which have or may be entitled to under the Constitution and Laws of Alabama, in regard to the collection of the above amount, or the amount which may owe during this year, and the cost incurred in the collection thereof.

Witness : [I. S.]
. [I. S.]
. [I. S.]

Now, in order to secure the payment of a note or writing of which the above is a copy, which note includes the amount of \$

due as a balance of last settlement and which is hereby acknowledged, and also the payment of any future advances due and owing by to the said, or which may be owing him during the year 189 . . . whether for future advances or otherwise. . . . do hereby grant, bargain, sell and convey unto the said, my entire crop of Cotton, Cotton Seed, Corn, Fodder, Peas and Potatoes, which may be grown by and my family, or in which or any of family may have an interest, on the plantation in said county, known as the place, or any other place, in said county, and the following described property, to-wit : to have and to hold all the above described property to the said his heirs and assigns forever. Upon the following condition, nevertheless : If shall well and truly pay this said note, and all future indebtedness which may then owe the said when the same falls due, then this conveyance shall become null and void, but in case shall fail to make such payment, then the said is hereby authorized and empowered to take possession of any and all of said crops and personal property, and sell the same at such time and place he may think proper, for cash ; and may sell said real estate, at auction, for cash, at the Artesian Basin, in Montgomery, Ala., after having given four weeks' notice of the time, terms and place of sale, by four weekly insertions thereof in any newspaper then published in said city. And out of proceeds of such sales he shall first pay all expenses incident thereto, then reserve enough to pay said note and interest, and said future indebtedness which may then owe him, and the balance he shall pay over to And the said is hereby authorized to purchase said real and personal estates the same as if he was a stranger to this conveyance, and should he so purchase, the auctioneer making the sale is hereby authorized and directed to execute a deed conveying all of interest therein to the said, and hereby covenant with him, his heirs and assigns, that will warrant and forever defend the title so made against the lawful claims and demands of all persons. And to expedite the payment of said note or writing when due, and to save expenses hereby waive right under the Law to have said above mentioned personal property advertised before sale ; and that he shall apply the proceeds of sale first, to all expenses of seizure and sale, including all attorney's fees for collection and adjusting the same, and the payment in full of said note or writing, if any over, to be paid to, and do hereby declare and represent to the said that there is no other or prior lien, claim or encumbrance on any portion of the above described property, except, and that the money or advances hereby obtained by from the said is obtained on the faith of this representation.

In testimony whereof, have hereunto set hand
and seal this the day of , 189 . . .
Signed and sealed in presence of [L.S.]
. [L.S.]
. [L.S.]

When one of these mortgages has been recorded against the southern farmer, he has usually passed into a state of helpless peonage to the merchant who has become his creditor. With the surrender of this evidence of indebtedness, he has also surrendered his freedom of action and his industrial autonomy. From this time until he has paid the last dollar of his indebtedness, he is subject to the constant oversight and direction of the merchant. Every mouthful of food that he purchases, every implement that he requires on the farm, his mules, cattle, the clothing for himself and family, the fertilizers for his land, must all be bought of the merchant who holds the crop lien, and in such amounts as the latter is willing to allow. Except for cash no other merchant will sell him anything, for the first merchant holds the lien on his property and prospective crops, and the second merchant would have nothing as a guarantee of repayment. When the crop is gathered it is the advancing merchant who furnishes the market for the same. The farmer can exercise no right to hold his crop, or to seek his own market, until he has delivered to the merchant enough of the produce which he has raised to cover, at the ruling market prices, his indebtedness to the latter for supplies. Should the total receipts for his crops be insufficient to wipe out his indebtedness to the merchant, as very often proves to be the case, his contract binds him to continue his dealings with the merchant for the succeeding year, and to submit to the latter's demand for additional security in order to obtain credit for the future. But it

is not alone with respect to the buying of his merchandise and the sale of his produce that the farmer is subject to the control of the merchant creditor. The latter dictates what crops shall be grown, and how much of each. As the basis of the credit system consists in the lien on the crops that are to be planted, personal property and real estate being considered only as collateral security, it follows that the merchant will accept as a pledge of repayment for his loans only those crops whose complete failure is improbable, and for which he can readily find a market. It is in this connection that the agricultural credit system of the southern states has so profoundly affected the later history of cotton culture, and has exerted an influence strong enough to determine almost completely the direction which southern agriculture has taken since the close of the Civil War. The facility for marketing cotton, due to the superb commercial mechanism for moving the crop which I have attempted to describe in a later chapter¹, has caused merchants to give the preference to cotton as security for their loans, and to demand that their customers who seek credit for merchandise shall raise cotton to repay them for the advances which the latter have received. This demand by the merchant for cotton has been readily conceded by the majority of the farmers in the cotton belt. The ready sale which cotton finds at any time of the year has made this staple known throughout the South as the "cash crop," and has led farmers as well as merchants to give its production the preference over that of other crops². The freedmen, especially, have shown a strong liking for cotton, due doubtless, in addition to the above reason, to the fact

¹ Book II, Chapter X.

² Otken, "Ills of the South," 56.

that they are more familiar with its cultivation than with that of other staples, and that its culture permits of a concentration of the laborers, the negro's social instincts impelling him to work in company with others rather than by himself.

But there is a further reason which impels the merchants to insist on the raising of cotton by their credit customers. The two articles of merchandise in which the advancing merchant in the South principally deals, and on which credit is most frequently given, are corn and bacon. Both of these commodities can be easily and cheaply produced at home, and it is certainly the interest of the farmer to produce them, for they form the chief items in the food supply of the agricultural classes of the South. But it has been the policy of merchants to discourage their production. The raising of corn would not only give a less marketable crop into the hands of the merchant, but it would eventually lose him his customers, for the raising of his own supplies would release the farmer from the necessity of doing business on a credit basis. The farmer has, therefore, been encouraged to raise cotton exclusively, or nearly so. "When he saw the wisdom of raising his own corn, bacon, grasses, and stock, he was notified that reducing his cotton acreage was reducing his line of credit!" Following in this line for a few years, with a steady decline in the price of cotton, making its production unprofitable to the small farmer, the latter has been plunged hopelessly in debt. The high prices which he has been obliged to pay for his merchandise, and the low price which he receives for his cotton, leaves the balance of the account each year stand in favor of the

¹ Henry W. Grady in the *New York Ledger*, 1889; quoted by Otken, "Ills of the South," 57.

merchant. The contract which the farmer has entered into with the merchant binds him to continue his business with the latter until the old debt is paid, and as the end of each year finds him unable, in his own words, "to pay out," he begins again the weary struggle for existence, with new burdens laid upon him, but still deluded by the vain hope that "more cotton" will enable him to escape from his load of indebtedness.

The prices which southern farmers have been obliged to pay for merchandise bought on a credit basis have been the subject of frequent comment by recent writers on the South. Various statements and bits of informa-

In the table on page 153 the columns headed, "Percentage of Credit Over Cash Prices. Six Months," should be headed, "Percentage of Credit Over Cash Prices," and the columns headed, "Percentage of Credit Over Cash Prices. One Year," should be headed, "Equivalent to an Annual Interest Rate of."

of affairs in these two states which may be considered typical of the other cotton states, I have condensed the results of these investigations in the following table.¹ It is believed that it will show in a fairly reliable manner the disadvantages under which the credit purchaser of the South is to-day struggling. From this table it

¹ Compiled from county and parish returns published in the Publications of the Georgia State Department of Agriculture, and the Reports of the Commissioner of Agriculture of Louisiana.

YEAR.	HOME SUPPLIES.						GEORGIA										LOUISIANA.					
	CORN.			BACON.			HAY.	AVERAGE CASH AND CREDIT PRICES FOR CORN AND BACON.						AVERAGE CASH AND CREDIT PRICES FOR CORN PER BUSHEL.								
	CORN.		Percentage Produced.	BACON.		Percentage Produced.		CORN PER BUSHEL.				BACON PER POUND.				CORN PER BUSHEL.						
	Percentage Produced.	Percentage Purchased.		Percentage Produced.	Percentage Purchased.			Cash Price.	Credit Price.	Percentage of Cash Prices.	Percentage of Credit Over Six Months.	Percentage of Credit Over One Year.	Cash Price.	Credit Price.	Percentage of Cash Prices.	Percentage of Credit Over Six Months.	Percentage of Credit Over One Year.					
1880.	71	26	71	29	71	29	78	98	102	30.7	61.4	9	10.8	20	40	67.7	96.7	85.6	One Year.			
1881.	98	21	89	25	112	25.8	112	89	112	25.8	51.6	8.0	11.4	42	84	67.7	96.7	85.6	One Year.			
1882.	82	18	59	32	106	25.5	133	106	133	25.5	51.0	14	17	21.4	42.8	72.9	93.5	56.4	One Year.			
1883.	82	18	59	32	106	25.5	94	67	94	38	76	10.2	12.9	33	66	62.5	85.0	72.0	One Year.			
1884.	82	18	59	32	106	25.5	94	67	94	38	76	10.2	12.9	33	66	62.5	85.0	72.0	One Year.			
1885.	82	18	59	32	106	25.5	94	67	94	38	76	10.2	12.9	33	66	62.5	85.0	72.0	One Year.			
1886.	74	26	62	38	1385	34.8	93	69	93	34.8	69.6	8.0	11.4	42	84	67.7	96.7	85.6	One Year.			
1887.	74	26	62	38	1385	34.8	93	69	93	34.8	69.6	8.0	11.4	42	84	67.7	96.7	85.6	One Year.			
1888.	71	29	62	38	1388	31.8	87	66	87	27.0	54.0	9.7	12.3	26	52	72.9	93.5	56.4	One Year.			
1889.	65	35	63	37	1889	29.0	80	62	80	31.8	63.6	7.9	10.3	30.4	60.8	62.5	85.0	72.0	One Year.			
1890.	75	25	63	37	1890	29.0	80	62	80	29.0	58.0	7.5	9.7	29.3	58.6	64.7	86.0	65.8	One Year.			
1891.	75	25	63	37	1891	29.0	80	62	80	29.0	58.0	7.5	9.7	29.3	58.6	64.7	86.0	65.8	One Year.			
1892.	75	25	63	37	1892	29.0	80	62	80	29.0	58.0	7.5	9.7	29.3	58.6	64.7	86.0	65.8	One Year.			
1893.	75	25	63	37	1893	29.0	80	62	80	29.0	58.0	7.5	9.7	29.3	58.6	64.7	86.0	65.8	One Year.			
1894.	75	25	63	37	1894	29.0	80	62	80	29.0	58.0	7.5	9.7	29.3	58.6	64.7	86.0	65.8	One Year.			
1895.	75	25	63	37	1895	29.0	80	62	80	29.0	58.0	7.5	9.7	29.3	58.6	64.7	86.0	65.8	One Year.			
1896.	75	25	63	37	1896	29.0	80	62	80	29.0	58.0	7.5	9.7	29.3	58.6	64.7	86.0	65.8	One Year.			

will be seen that those farmers who purchase on credit are obliged to pay for necessities of life which can be easily produced at home, prices varying from twenty to fifty-five per cent. higher than the cash prices for the same commodities at the same stores; or a difference equivalent to an annual rate of interest on the cash price of from forty to one hundred and ten per cent. (The short time for which most of these accounts run makes six months a very liberal estimate for the average length of the period for which the loan is made.)

There is a considerable difference in the customs of merchants and localities as to the methods of selling goods on the credit system. In some sections of the cotton belt and by some merchants a difference in the credit price of an article is made according to the length of time for which the credit is to run. Most farmers begin securing advances in the early spring when preparations are being made for putting in a new crop. Payment is expected as soon as the farmer can gather enough cotton to make good the amount which has been advanced to him in supplies. This will depend largely on the locality and season, but the usual time for beginning to gather the crop is from August 15th to September 15th. In a portion of the sea island cotton region of lower Georgia, the plan is followed of deducting at various times from the credit price of an article one-fourth the difference between its cash and credit prices at the time of planting the crop. Thus flour, which sells for a cash price of three dollars per barrel on March 1st, will sell on credit at that time for four dollars. On the first of June a reduction of the credit price to \$3.75 will take place. In July it will be sold for \$3.50, and about the first of August another quarter of a dollar will be taken off. All purchases made with-

in thirty days of settlement time are made at cash prices. In other portions of the South, as in central Alabama and in the great cotton region along the Mississippi, the rule seems to be to maintain throughout the summer the same difference between cash and credit prices that was made when the crop was planted, except that cash prices are given on credit purchases made within thirty days of settlement time. Merchants are frequently found who are unable to give the difference between their cash and credit prices, because none of their customers ever buys for cash. This seems to be especially true of certain kinds of merchandise, as for example, fertilizers. A Georgia merchant who sells each year over one thousand tons of commercial fertilizers, reports that he has never sold any for cash, although he would gladly make a difference of several dollars per ton in favor of cash purchasers.¹

The use of the credit system is not confined to a small number of the farmers of the cotton belt. Ninety per cent. of the cotton growers of Alabama, it is stated on high authority, make their purchases in this way, and pay prices on an average twenty-five per cent. higher than do their neighbors who buy for cash. Throughout the cotton belt it is probably no exaggeration to say that three-fourths of the cotton planters and their tenants, white and black, buy "on time," and pay usury to factors, merchants or others who have advanced money or supplies on the prospective cotton crops of the borrowers.

It has been usual to criticise severely the advancing merchants, and to make them responsible for the disasters which have befallen the southern farmers. Such a view of affairs is not only unfair to the merchants but

¹ Cf. H. C. White, *Loc. Cit.*, 175.

is unmindful of the development of affairs which has made the merchant the natural money lender of the South, and it overlooks the principle which makes profits, in a large measure, the remuneration for business risks. It is doubtless true that many of the advancing merchants have taken advantage of their power over their ignorant customers to charge them prices out of all proportion to the value of the merchandise sold. The credit system with its arbitrary methods of making differences between cash and credit prices, presents great possibilities for the exercise of unscrupulous methods on the part of merchants, and this would naturally attract to this business persons whose sordid dispositions prompt them to grasp every opportunity of enriching themselves at the expense of their neighbors. And yet it is questionable whether the business of merchandising in the South presents such great possibilities of becoming speedily wealthy as the above price quotations would seem to indicate, or as many writers on the credit system have intimated. Honesty is a virtue which is little regarded by many of the people in some sections of the South, especially by the freedmen, who are nearly all recorded on the books of the merchants as credit purchasers. The danger of losses involved by doing business on credit with this class of purchasers has been the prime cause of the great difference between cash and "time" prices, while the frequent failures of advancing merchants, and the unsettled accounts which even the most careful and shrewd of those merchants are obliged to carry over from year to year, do not furnish proof to the statement that, "the road to wealth in the South, outside of the cities and apart from manufactures, is merchandising."¹

¹ George K. Holmes, "The Peons of the South," *Annals of American Academy of Political and Social Science*, IV : 267.

But it is in its relation to the culture of cotton that the credit system has in this essay an especial importance. Nothing but cotton has been considered by the merchant as a satisfactory security for the advances made by him in money or supplies. "His cry for cotton, and more cotton, to keep pace with the indebtedness, has led to so enormous an increase in the production of this fibre since the war, that the North, ignorant of the real situation, has pointed to it as an evidence of the superiority of the free, over the slave labor of the blacks."¹ In spite of an almost steady decline in the price of cotton since the war, the acreage and production of this staple have almost as steadily increased. The cost of production of the staple by the small farmers has for several years been above the market price of the commodity when harvested, but the increase in cotton growing has nevertheless continued. When the price has sunk so low that merchants have begun to fear the total bankruptcy of their debtors, they have relaxed somewhat their demand for cotton as a pledge for indebtedness, and have sought security in other crops or in other kinds of property. This, aided by an especial effort on the part of the planters, especially the large cotton growers, has tended for a year or so to reduce the cotton acreage and to increase the production of other commodities, and has given occasion for frequent prophecies and rejoicings on the part of sympathetic persons that the southern farmer was beginning to learn the lessons of economy and self-help, to produce his own food, and to escape at last from his peonage to merchants. The credit system was thought to be dead in 1868 when the crop failures had ruined the factors who had made advances on the

¹ George K. Holmes, *Loc. Cit.*, 257. Cf. H. C. White, *Loc. Cit.*, 175.

cotton.¹ Again, in 1873 the system was thought to be crippled, and once more in 1881, at the time of the first Atlanta Exposition, the problem of southern agriculture was supposed to be forever solved. The enormous increase in the production of cotton since 1890, and the low price to which this staple had fallen by 1894, led merchants to refuse in many cases to grant further credit to their customers, and thus compelled a reduction of the acreage in cotton for 1895. This has once more led to optimistic prophecies in regard to the future. It is doubtful, however, whether the present tendency to reduce the acreage of the staple will prove to be more than temporary. While the credit system remains as it is, the class of cotton raisers which needs most of all to maintain the smaller acreage, is unable to act independently in this matter.

The indirect effects of the credit system on the agricultural and industrial development of the southern states have been scarcely less remarkable or less destructive than its direct result in causing an overproduction of cotton. There is an especial need in the South to-day of a force which shall awaken the old planters from the lethargy into which they were cast by the loss of their fortunes as a result of the Civil War; which shall put new hope into the breasts of the "poor white" farmers who have for a quarter of a century been struggling to improve both their economic and social condition, and which shall furnish ambition to the negroes to seek to elevate their position in southern society and to better their physical surroundings. Such an influence cotton exerted in the early days of its culture, and such has been the result in certain sections of the South of the rise of manufacturing and the development of the mineral re-

¹ Loring and Atkinson, "Cotton Culture and the South," 158.

sources. But the pernicious credit system has worked directly opposite results. It has continued the old planter in his discouragements, kept the "poor white" poor, and has enabled the negro to maintain a "hand to mouth" existence, and to live in that condition of lazy contentment which is the boon of the idle and improvident. As in the case of every adversity, there are those who have struggled through and beyond it, but to the man of average ability the high charges for loans and his compulsion to raise cotton have furnished an obstacle which has prevented his escape from indebtedness and has forbidden his undertaking to improve his agriculture. The credit system has stimulated unnaturally the demand for land for rental purposes and has injured its sale.¹ The negroes prefer to rent land rather than to labor for wages, because the credit furnished by the merchant enables them to live off the future crops and to control their own labor during the present. The unwillingness of the merchants to grant credit on the land has aided in keeping down its selling value, and to-day throughout the cotton belt we find that the rental value of the land equals from one-fourth to the total selling value. But despite the unwillingness of the merchants to take the land as security, the growing indebtedness of their customers has often forced them to do so. The foreclosure of the mortgage which in many cases was sure to be the result, has turned over to the merchants the ownership of these farms. It was this tendency which caused the late Henry W. Grady to fear lest there might be a return to a landed aristocracy in the South. "There is beyond question," he wrote in 1881, "a sure though gradual rebunching of the small farms into large estates, and a tendency toward the re-establishment of a landholding oligarchy. Here and

¹ George K. Holmes, *Loc. Cit.*, 267.

there through all the cotton states, and almost in every county, are reappearing the planter princes of the old time, still lord of acres though not of slaves."¹

The necessity which has driven so large a proportion of the farmers of the cotton belt to seek credit since the close of the war, and the rapid development of the means of furnishing credit, which has marked the commercial and industrial advancement of the present century, give rise to the question: are there no other means than the above by which the southern farmer may obtain credit? no other lender than the merchant to whom he may go for loans?

For the majority of the farmers in the cotton belt who desire to borrow, these questions must be answered in the negative. The lack by most of the farmers of valuable personal property which might stand as security for short-time loans, and the small amount desired by most of the borrowers, prevent the majority of the cotton growers from taking advantage of the loan and discount features of such banks as exist. And, indeed, the banking facilities of the southern states are very imperfectly developed. Within the ten cotton states the number of national banks in September, 1895, was only 417, of which 214 were in Texas.² On the basis of the population of 1890, this gives only one bank to every 33,660 inhabitants of these states, or, excluding Texas, one bank to every 58,130 inhabitants, as compared to an average of one bank for every 16,600 inhabitants for the entire United States. The lack of state and private banks seems to be equally felt in most parts of the cotton belt, although there has been a marked increase in the number of these institutions in

¹ Henry W. Grady, *Harpers' Magazine*, LXIII: 719-734.

² Statistical Abstract of the United States, (1895), 53-4.

some of the eastern states during the last decade. Thus Georgia, which in 1884 had only fifteen national and twenty-two state banks, in 1894 had twenty-seven of the former and one hundred and eighteen of the latter class. These were to be found in seventy-one places, situated in sixty-three counties.¹ This still leaves, however, one hundred and twenty-three counties in this state unsupplied with any incorporated bank.

About the year 1880, Major Harry Hammond, the special agent of the United States Census, detailed to write on cotton production in South Carolina, discovered that in the Piedmont region of that state the farmers were making use of the country banks to obtain their loans.² A fuller account of these banks and their operations was given by the same gentleman in the "Handbook of South Carolina," published in 1883. As this will have a bearing on what is to be said in a later chapter in regard to the credit system, Major Hammond's account is herewith given in full:

"There has grown up in this region a system of banks at the county seats for the accommodation of farmers. The National Bank of Newberry was the first to be established; under the excellent and judicious management of its president, Robert L. McCaughrin, the operations of this bank have added largely to the prosperity and independence of this county; which, besides leading in cotton production in proportion to its area, is, in many other regards the most thriving in the region. The capital of this bank, \$150,000, was subscribed by the citizens of the county, except \$12,000, and ninety-five per cent. of the stock

¹ R. T. Nesbitt, "Georgia, Her Resources and Possibilities," p. 22.

² H. Hammond, "Cotton Production in South Carolina." Tenth Census of the United States, VI: 321.

which is at thirty per cent. premium and not for sale, is now held within the county. It has six hundred and fifty-four accounts, three-fourths of which are with farmers. These accounts vary in amount from forty dollars upwards; only sixty-five of them, however, reach or exceed one thousand dollars. Since 1872 the rate of discount has been from seven to twelve per cent., or from one-half to one-third of the average rates prevailing elsewhere in the state. The loans during the crop season aggregate \$324,000, and the doubtful debts for the last ten years do not reach in all \$6,000. Loans are made purely on personal security or on collaterals; liens and mortgages are not asked for or given. If there is a question as to the ability of the party seeking accommodation to meet his payments promptly, he is required to get the indorsement of one or more of his neighbors. In this way it frequently happens that three neighbors indorse each others' notes, so that if ill-luck befall one during a crop season, the others help him through, and it is found that such assistance is equalized in a series of seasons. Besides the direct assistance this bank affords, its direct influence is highly beneficial; not only does it encourage personal trustworthiness and integrity, but by the circulation of its capital during the active season of the year, it gives a healthy cash tone to business; where a large proportion of the sales are for ready money, the purchases by merchants are more carefully made, and even advances on liens are less exorbitant than elsewhere."¹

Fourteen years have elapsed since the publication of the above account which conveys so much that should be hopeful to the southern farmer. And yet, while there has been some increase in the number of banks

¹ "Handbook of South Carolina," 154-55.

doing business in this and the neighboring states during this time, and while the banks in the above region are still said to be in a flourishing condition and to be of much assistance to the farmers, the failure to establish country banks in most portions of the cotton belt, and the apparently small patronage which such banks as have been established receive from the farmers, shows that there is still something lacking to make these banks a permanent and universal source of relief to the agricultural credit purchasers of the cotton states. Indeed, it appears from a recent statement made by a correspondent from the very region in which these banks have been longest established, that even here they have failed to solve the problem of agricultural credit for a very large proportion of the farmers. In answer to the question, What is the actual financial and material condition of the cotton raisers in Laurens and Newberry counties, South Carolina? Mr. J. Washington Watts, of Laurens, S. C., writing under date of July 11, 1893, says: "The actual financial and material condition of the cotton raisers is very bad; generally in debt. In my opinion, the majority are making their crop with supplies bought on credit, and are in debt to that extent at least. I estimate the proportion of insolvent to be at least three-fourths of our farmers. Those who raise even a portion of their supplies are doing fairly well, but very few do this, preferring to risk the cotton which sinks them deeper in debt each year."¹

The failure of the country banks to bring relief to southern farmers who are seeking credit seems to be due in some instances, at least, to the high interest charges

¹ "Letters from Prominent Cotton Growers"; Report of United States Senate Committee on Agriculture and Forestry, 53d Congress, 3d session. Report 986, Part I, p. 286.

for loans. Usury laws in all the states prohibit the taking of interest in excess of fixed maximum rates, but every one familiar with legislation regarding usury, knows how easily these laws are evaded. Thus in a portion of Georgia where the maximum rate of interest which can be taken is fixed by law at eight per cent., the country banks which lend money to farmers discount the principal plus the legal interest, at the rate of fifteen per cent. The farmer seeking the loan of one hundred dollars for one year will thus receive \$91.66, in return for which he will be expected to pay at the end of the year \$108, thus actually paying an interest rate on the money received of nearly eighteen per cent. For loans made for less than one year's time, the banks discount at the rate of one and one-half per cent. per month. These rates taken in addition to the fact that about the only security which most of the farmers have to offer, crop liens, are not accepted by the banks, show plainly that these agencies of so much value to the credit-seeking merchant are of little practical benefit to the southern farmer who finds himself in straitened circumstances.

The late Henry W. Grady had strong hopes that the loan agencies which at the time of his writing (1881) were beginning to spring up in all parts of the South, would lend material aid toward the solution of the credit problem. He gave an account of the success of these institutions, and related instances of their having loaned money to farmers on good real estate security at interest rates of seven or eight per cent.¹ But while the number of these agencies established mainly by a few northern companies, has gone on increasing since Mr. Grady wrote, their service to the farmers has not been of such

¹ Henry W. Grady, *Harpers' Magazine*, LXIII : 723-4.

a nature as to afford much hope of their attaining the success that was predicted for them. In the first place, they do not meet the need of the southern farmers for short time loans which will carry them through the cultivating season. The usual plan of these agencies is to loan money for five years, taking as security real estate at from forty to fifty per cent. of its appraised value. Then, as in the case of the banks, the interest charges seem unusually high. The nominal charge for interest is eight per cent., occasionally seven per cent. But in order to avoid the legal penalty for charging interest in excess of eight per cent., certain fees or commissions amounting usually to about twenty dollars on every hundred dollars borrowed, when the loan is for three hundred dollars or less, as well as the first year's interest, are deducted from the amount borrowed. Thus, a Georgia planter who borrowed \$400 from one of these agencies, actually received only \$335. This burden has been especially severe on those who borrowed money when cotton was selling for ten or twelve cents a pound, and were obliged to pay it back when prices had fallen to five or six cents per pound.

Nothing shows more clearly the need of better credit facilities in the South than the willingness on the part of the more thrifty and industrious farmers to borrow money on such terms rather than to submit to the high prices and dictation of the advancing merchants.

CHAPTER VI.

SOUTHERN AGRICULTURE SINCE THE CIVIL WAR.

(Concluded.)

C. The present Condition of Cotton Culture and the Cotton Growers of the United States.

By 1876 the culture of cotton had apparently recovered from the industrial paralysis caused by the Civil War and the subsequent era of reconstruction. The crop harvested that year corresponded in amount closely to that gathered in 1860, the largest of the ante-bellum crops. The price of the staple had steadily declined since 1864, but at thirteen cents a pound (average New York prices), was still far from discouraging, while the causes which had operated to bring about this decline, such as the greater reliability and efficiency of labor, and the adoption of better methods of tillage, were generally favorable to the producer.

There is very little in the history of cotton growing to excite attention during the fifteen years following 1876, except the rapid growth in production. Many writers in both England and America had predicted that emancipation would result in an increase in the production of cotton in the southern states, but no one could have foreseen the extent of this increase, nor the rapidity with which it came about when order and quiet had been restored, and the South was left free to guide her own course of development.

The cotton crop harvested in 1876 is stated to have been slightly in excess of two billion pounds, grown on a little less than twelve million acres. By 1880 the

amount produced was in excess of two billion, six hundred million pounds; by 1890, nearly three and one-half billion pounds were raised, and by 1895 production had swelled to four billion, seven hundred and ninety-two million pounds, and the cotton area was estimated at twenty-three million acres.¹ Despite this rapid increase in both acreage and yield, trade conditions continued to favor the producer until 1890. There was, it is true, a continuation of the fall in prices, but the rate of decline was small when compared to the increase in production, as may be seen in the following table :

Years.	Average Annual Production. Million Pounds.	Increase. Per Cent.	Average New York Prices.	Decrease. Per Cent.
1876-80 . . .	2.612		11.77 cents	
1881-85 . . .	2.805	7.38	11.06 "	6.51
1886-90 . . .	3.217	14.71	10.44 "	5.93

Only once during all these years did the average price of cotton on the New York market fall below ten cents per pound for the commercial year, while in the South the improvements effected in agriculture, cheaper transportation, and the greater yield per acre served to compensate for the decline in the price of the staple, which was slowly taking place. For in spite of the enormous increase in production, the consumption of cotton by the European and American mills was increasing at a still more rapid pace. Had it not been for the relatively important part which Indian cotton still played in European consumption, there probably would have been no decline whatever in the price of the American staple.

It is only since 1890 that the condition of the cotton grower has been rendered serious by the depreciation in the price of his product. The agricultural depression

¹ Shepperson, "Cotton Facts," (1895), 13-17, 80.

which has befallen the South as a result of these low prices has excited the attention of the whole country, and the keenest controversy has been waged over the question as to what has caused the fall in prices and the accompanying financial distress among the agricultural classes. The extent of this fall of prices and what it has cost the southern farmer, can only be appreciated when the total selling value of the cotton crop during recent years is compared with the years preceding and it is seen what a falling off there must have been in the farmer's income. In 1875-76 the cotton crop of the United States amounted to a sum total of 4,632,313 bales, and its value computed on the basis of average New York prices for middling uplands was \$267,540,000. In spite of an almost steady fall in prices between 1875 and 1890, the total selling value of the crop generally showed an increase, so that the large crop of 1890-91 whose average price showed a decrease of two and one-half cents per pound under that of the preceding year, had a total selling value of \$429,792,716. The decline in values since that year has been as follows:

Year.	Total Crop. Bales.	Average New York Prices.	Total Selling Value.
1890-91	8,652,597	9.03 cents	\$429,792,047
1891-92	9,035,379	7.64 "	391,424,716
1892-93	6,700,365	8.24 "	284,279,066
1893-94	7,549,817	7.67 "	294,593,859
1894-95	9,901,251	6.50 "	289,809,616
1895-96	7,157,346	8.16 "	294,095,347
1896-97	8,757,964	7.72 "	338,057,410

According to this exhibit, the planter who in 1894 raised twice as much cotton as in 1875, received a total income from his crop no larger than that received in the earlier year, and he received nearly one-third less than that received from a much smaller crop in 1890.

In 1893 the Senate Committee on Agriculture and

Forestry made a lengthy report to Congress on the condition of cotton growers in the United States. In this report it is stated that "there is a general consensus of opinion that cotton cannot, except under the most favorable circumstances, be raised profitably at less than eight cents per pound, nor without loss under seven cents."¹ Now when we remember that from the prices quoted in the above table, which for the seven years average only 7.85 cts. per pound, must be deducted charges for transportation and commissions for selling the crop, we find that the plantation price of cotton since 1890 has seldom been high enough to allow the producer a profit and not infrequently it has caused him an actual loss. With an ever increasing acreage and with every increasing effort on the part of the farmer to extricate himself from his perilous situation, there has followed a further fall in the price of his produce and a steady decline in his annual income. No wonder, then, that the result of these discouragements has been "to produce wide-spread discontent among cotton producers and a disposition to discredit their old time conservative methods and to induce a too ready acceptance of plausible theories for relief."²

Among the causes which have combined to bring about this fall of prices there are doubtless some that have been a direct benefit to the producer. Such are the improved methods of cultivation which have enabled the planter to secure a greater yield from a given acreage than heretofore. According to the statistics of acreage which we possess, and which can be considered as only approximately accurate, the average yield per acre throughout the cotton belt for the decade 1881-90

¹ Report of Senate Committee on Agriculture, I: iv.

² *Ibid.*

was 168 pounds, while in the five years 1891-95 the average was 197 pounds.¹ It would, of course, be incorrect to represent this as a clear gain to the farmer. The increase has been caused by the expenditure of additional labor and capital on the land, and this expenditure, especially for fertilizers, has been considerable. In 1879 the average yield of cotton per acre in Alabama was 136.02 pounds and in 1889, 158.11 pounds. The amount of fertilizers purchased in the state during the latter year was more than double that purchased in 1879.² In Georgia where there was a similar increase in the yield per acre, the amount of commercial fertilizers inspected for sale increased from 48,648 tons in 1874-5 to 315,612 tons in 1893-4.³ Similar though less noticeable results were produced in South Carolina and Louisiana. But while the increased yield per acre has, therefore, not been a net gain to the farmer, it is safe to say that it has yielded him a profit; otherwise the purchase of fertilizers would not have continued. The price of these fertilizers has also declined more than *pari passu* to the decline in the price of cotton.

The producer has also gained by the decline in the cost of other elements necessary to production. The increase in white labor has rendered labor more efficient and therefore cheaper. Plows, mules and horses, cotton bagging and iron ties, trace chains, hoes, gins and presses, food and clothing have all shown a decline in price, which has been advantageous to the cotton raiser.⁴

¹ Report of Latham, Alexander & Co., (1895), p. 125.

² Eleventh Census of the United States. Volume on Agriculture, 45-46.

³ Publications of the Georgia State Department of Agriculture, (1894). 255.

⁴ Watkins, "Cotton and the Currency," Sound Currency Pamphlets, Vol. III, No. 21, p. 13.

"It also costs much less to handle cotton after it gets to market; commissions for selling, storage, insurance, drayage, etc., are all cheaper than formerly."¹

Probably the greatest factor in cheapening the cost of production has been the lowering of transportation rates. The cost of sending one hundred pounds of cotton by steamer from New Orleans to New York was in 1873 sixty cents, in 1880 forty-five cents, and in 1892 thirty-two cents. In 1886 it cost eighty-five cents to send one hundred pounds of cotton by rail from Atlanta to New York. In 1893 the price had fallen to sixty-seven cents.² While the advantage gained by the farmers through the cheaper and improved means of production can only be estimated, it is probably fair to say that eight cent cotton is as remunerative to-day as ten cent cotton was in 1860.

There is another way in which the loss to the farmer through lower prices of cotton has been partly offset, and that is through the sale of the cotton seed, a product whose uses were scarcely known previous to the war, and which was not highly valued for many years afterward. In 1885 there were only forty cotton seed oil mills in the country. There are now three hundred of them, and a still further expansion of this industry may be expected.³ In 1889 the cotton growers of the South disposed of 1,793,369 tons of cotton seed at an average price of \$8.84 per ton, giving a total value of \$15,852,525.⁴ Not all of the farmers have sold their cotton seed. Those of the Atlantic states have usually

¹ Watkins, "Cotton and the Currency," 13.

² Schoenhof, "A History of Money and Prices," 281.

³ Patrick Walsh, "Agriculture in the South." *The Independent*, March 7, 1895, p. 3.

⁴ Eleventh Census of the United States, Volume on Agriculture, 61.

preferred to retain it for the purpose of fertilizing their land. While the power of the cotton seed oil trust to depress prices has not always allowed the producers to obtain the full value of their seed, yet the returns from its sale have contributed not a little to increase the income of those who have thus disposed of this product.

But after making all due allowance for the above circumstances that have served to reduce the loss which the cotton growers have suffered from falling prices, it must be admitted that they fail to explain away this loss or to account for the rapid decline in the price of cotton since 1890. And it is easy to exaggerate the importance of these factors and their influence on the cost of production, as seems to be the tendency of some writers.

Cotton seed may undoubtedly be made an important source of income. Yet the total value of that sold in 1889 was but little more than four per cent. of the total value of the cotton crop for that year, and this would compensate for less than one-half per cent. decline in the price of the lint. There has no doubt been a decline in freight rates, but the reduction has been less in the South than in the northern and western states, and unjust discriminations in favor of certain southern cities have worked to the disadvantage of cotton growers situated near the less important shipping points.¹ It is impossible to measure the gain to the cotton growers secured through the lowering of the cost of production on the plantation, but it may be said that while it is true that food is cheaper, the increased acreage in cotton has caused the planter to raise less of his own supplies and to buy more from the North and West, and this

¹ Newcomb, "Federal Railway Rates," *Political Science Quarterly*, June, 1896, 211.

has more than offset the advantage gained from a lowering of the price of provisions.¹

And even the most liberal allowance for a reduction in the cost of producing and marketing cotton, while it might be accepted as an explanation of the gradual decline in the price of cotton between 1876, and 1890, utterly fails to account for the sudden fall from an average of 10.44 cents between 1880 and 1890 to an average of 7.81 cents for the years 1891-95. It cannot be said that causes tending to lower the cost of producing cotton since 1890 were not operative in the decade preceding.

It has been usual to attribute the cause of low prices and the agricultural depression in the South to over-production of cotton, although there are some writers who are inclined to deny that there has been any over-production.² Elsewhere in this essay,³ I have sought to show by a study of the conditions prevailing on the world's market for cotton that over-production has actually taken place, and that the southern farmers are themselves directly responsible for the low price of their chief product. To merely assert, however, that low prices have been caused by over-production is about as satisfactory as to assert that fluctuations in prices are caused by changes in supply and demand, without pointing out what these changes have been. Admitting that there has been over-production in recent years, we are

¹ Moore, "The Condition of the Southern Farmer," *Yale Review*, III: 59. The two great articles of food in the South are "hog and hominy." Between 1860 and 1890 the population of the ten cotton states increased 87 per cent. The corn crop showed an increase of 30 per cent., but nearly the whole of this increase came from Arkansas and Texas. The number of swine showed an absolute decrease. The cotton crop increased 54 per cent. during the same period.

² Report of Senate Committee on Agriculture, I: v.

³ Book II, Chapter XI.

justified in asking what has caused it and what are the conditions surrounding the southern farmer which has caused him to continue to produce for a steadily declining market.

Prominent among the causes which have led to over-production in recent years is the increase in the cotton acreage west of the Mississippi river, especially in the great state of Texas. The opening up of new lands in this region has affected the cultivators of cotton in other sections in the same way as the settlement of the Mississippi bottom lands and the extension of cotton culture in the 'thirties and 'forties affected the planters in the Atlantic states, causing them to suffer from the phenomenally low prices which reigned between 1840 and 1850.

In 1859 and again in 1869, Texas stood sixth in rank among the cotton growing states, producing in the former year about one-twelfth and in the latter year about one-ninth of the total crop for the year. In 1879 Texas had moved up to third place among the cotton states, but even then produced but little more than one-seventh of the cotton grown in the country. A decade later she had passed her former rivals, Georgia and Mississippi, in both acreage and production, and in 1894-5 had over one-quarter the total cotton acreage and produced nearly one-third the cotton grown in the country.¹ Looked at merely from the standpoint of the western increase, it might with truth be said that the planters in the older states could not be charged with over-production of cotton, but that the responsibility for this must be shouldered by the Texas cotton growers. From the following table it appears that there has been but little increase in the quantity of cotton produced

¹ Shepperson, "Cotton Facts," (1895,) 16, 80.

outside of Texas since 1890, certainly not more than would have been demanded by the increasing consumption of the American and European mills.

Year.	Total U. S. Crop. Thous- ands of Bales.	Texas Crop. Thous- ands of Bales.	Annual Rate of Increase or De- crease. Per cent.	U. S. Crop outside of Texas. Thous- ands of Bales.	Annual Rate of Increase or De- crease. Per cent.	Annual Rate of Increase in World's Con- sump- tion.	Aver- age New York Prices. Cents.	Annual Rate of Increase or De- crease. Per cent.
1889-90 .	7,297	1,770	. . .	5,527	. . .	. . .	11.53	. . .
1890-91 .	8,674	2,000	13.0	6,674	20.7	6.06	9.03	-21.6
1891-92 .	9,018	2,400	20.0	6,618	- 0.8	-0.04	7.64	-15.3
1892-93 .	6,664	2,235	- 6.9	4,429	-35.0	-3.27	9.24	7.8
1893-94 .	7,552	1,925	-13.8	5,607	28.8	3.03	7.67	- 6.9
1894-95 .	9,837	3,219	72.4	6,618	18.0	7.58	6.50	-15.2
1895-96 .	7,157	1,990	-38.1	5,167	-21.9	-0.24	8.16	24.1
Average	8,028	2,220	7.7	5,806	1.6	2.18	8.39	- 4.5

The rapid increase of cotton growing in Texas is largely due to the natural advantages which this state possesses. The new and fertile lands enable the producer to raise as much or more cotton per acre without the use of fertilizers, and with less labor than can his competitor in the eastern states, who in order to produce a good crop is compelled to adopt intensive methods of farming. "Fertilizers are not used in Texas, except barn-yard, and not much of that," writes a correspondent to the Senate Committee on Agriculture; and he goes on to say that, "four-fifths of the black land of Texas is capable of producing one bale per acre with favorable seasons, which come once in about every three years. The timbered sandy land about averages, one year with another, a bale to three acres."¹ Outside of the river bottom lands very little of the cultivated area east of the Mississippi will produce one-third of a bale to the acre, without the use of fertilizers.

¹ Report of the Senate Committee on Agriculture, I: 369.

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the correspondents of the Senate Committee on Agriculture, one cannot but be struck with the practicality with which these practical men whatever be their theories as to the cause of low prices have assisted those farmers who raise their own supplies to prosper, while their neighbors who raised cotton only are in desperate circumstances. An Alabama farmer sums up the general verdict when he says: "The cotton raisers are prosperous in proportion to the supplies on the farm."¹ Advice to the cotton growers it should be said, is that the majority of them have in recent years, been unable to exercise their own discretion as to what they should cultivate. The crop lien system has taken away their industrial freedom and made them dependent on the merchants for the food and provisions they might otherwise have raised at home. Cotton raising has grown to be a necessity more than a choice. As a general rule, supplies cannot be obtained from the merchants on any other crop than cotton; consequently they are forced to raise it to get credit."² The system of agricultural credit, therefore, to which the last analysis must be referred the cause of overproduction of cotton and under-production of food crops. Uneconomical methods of production and bad farm management are not the least among the causes which have contributed to the financial depression among cotton growers, and they have been an indirect cause if not a direct one of the excessive planting of this staple. Cotton is the "lazy man's crop" in the South, although it is an expensive one to produce. In no one way has

¹ Report of Senate Committee, I : 308.

² *Ibid.*, 317. Cf. H. Hammond, "The Culture of Cotton," *Loc. Cit.*, 268 ; H. C. White, *Loc. Cit.*, 175.

of the Northwest, but they have adjusted themselves to the changed conditions. "The farmers of New York have greatly decreased the relative production of wheat and other staples adversely affected by changing railway rates, and have increased that of hay and potatoes, but little modified in that way. It is otherwise in most of the Gulf states of the South. They still rely upon the old staples which like wheat have been lowered in value at the seaboard by changed cost of transportation, and such staples as cotton, that by greatly increased production have over-stocked the market and thus fallen in price. The farmers in such states suffer the full effect of the losses by modern economic changes affecting the price of agricultural staples."¹ Instead of maintaining and seeking to increase his cotton acreage, the farmer east of the Mississippi should have reduced his acreage in cotton as rapidly as possible, increasing that of other crops, and raising cotton, if at all, as a surplus crop. The farmer can scarcely plead ignorance as an excuse for not having done so. For sixty years or more, southern agricultural writers and speakers have besought him to raise his own food supplies, and the practice of his more prosperous neighbors has furnished him with an example of the practicability and wisdom of so doing. As early as 1875 the commissioner of agriculture of Georgia showed that allowing for only a very moderate yield of corn and cow peas, the raising of these two staples would have yielded the farmer a net profit of \$8.32 per acre, while cotton, then selling at 15 cts. per pound on the New York market, gave a net profit of only \$4.52 an acre.² In reading over the re-

¹ L. G. Powers, Fifth Biennial Report of the Bureau of Labor of Minnesota, (1895-96), p. 399.

² Second Annual Report of the Commissioner of Agriculture of Georgia, 135.

ports of the correspondents of the Senate Committee on Agriculture, one cannot but be struck with the practical unanimity with which these practical men whatever be their own theories as to the cause of low prices have asserted that those farmers who raise their own supplies have prospered, while their neighbors who raised cotton exclusively are in desperate circumstances. An Alabama planter sums up the general verdict when he says : "As a rule cotton raisers are prosperous in proportion as they grow their supplies on the farm."¹

In justice to the cotton growers it should be said, however, that the majority of them have in recent years, been unable to exercise their own discretion as to what staples they should cultivate. The crop lien system has taken away their industrial freedom and made them dependent on the merchants for the food and provisions which they might otherwise have raised at home. "Cotton raising has grown to be a necessity more than a choice. As a general rule, supplies cannot be obtained from the merchants on any other crop than cotton ; consequently they are forced to raise it to get credit."² It is the system of agricultural credit, therefore, to which in the last analysis must be referred the cause of over-production of cotton and under-production of food crops.

Uneconomical methods of production and bad farm management are not the least among the causes which have contributed to the financial depression among cotton growers, and they have been an indirect cause if not a direct one of the excessive planting of this staple. Cotton is the "lazy man's crop" in the South, although it is an expensive one to produce. In no one way has

¹ Report of Senate Committee, I : 308.

² *Ibid.*, 317. Cf. H. Hammond, "The Culture of Cotton," *Loc. Cit.*, 268 ; H. C. White, *Loc. Cit.*, 175.

lack of economy contributed more to its over-production than in the purchase of commercial fertilizers. There can be no question of the benefits which the South has derived from the finding of rich deposits of phosphates and marl in various portions of her territory, which have been utilized only since the Civil War. In many localities the use of fertilizers is indispensable to the profitable production of cotton. A South Carolina farmer writes: "Most of our land without the aid of fertilizer would produce about one-fourth of a bale the first year, and in the course of a few years would not produce over one-eighth or one-tenth of a bale per acre. Without fertilizer we would have to quit planting cotton."¹ But the expense incurred for commercial fertilizers is a heavy one, usually ranging from 12 to 33 per cent. of the total value of the crop, depending on the amount applied as well as on the price of cotton, and this expense could usually be partly if not entirely saved by preserving and using barn-yard manures or home made composts. The commercial fertilizers are almost without exception bought on credit and seldom used on any other than the cotton lands. They are usually placed in the center of the ridge where they feed the cotton, but do little to bring up the fertility of the soil.²

There is a noticeable lack of economy in many other respects on the majority of southern plantations, although southern planters are not the only ones who are guilty of this charge. Many of the cotton growers

¹ Report of Senate Committee, I: 293; Cf. H. C. White, *Loc. Cit.*, 172 ff.

² It is still a disputed question as to whether commercial fertilizers should be broadcasted or applied in the drill. See White, "The Manuring of Cotton," in "The Cotton Plant," Bulletin No. 33, Office of Experiment Stations, Dept. of Agric., p. 189.

have no gardens and still many more keep no live stock except their work animals. Better implements have come into almost general use within the last twenty years, but these are often left unhoused when not in use and in a few years are "worn out." "There is a neglect and want of thrift which are a burden in themselves. The farmer is not willing to lend a hand to delay the dilapidation of his buildings. The plow is left at the end of the last furrow until the next year; a few nails or screws would save dollars of loss or of eventual credit with the merchants in scores of places."¹ There is far more truth than is generally appreciated at the South in the sentiment of an Alabama planter who writes: "I am unable to say that this depression or distress is produced by causes coming from the action or non-action of Congress or of our state legislatures. The trouble arises from bad management and want of proper economy at home."²

In discussing the causes which have produced the agricultural depression in the cotton states, too much emphasis cannot be laid upon the inefficiency and unreliability of agricultural labor. A Texas correspondent of the Senate Committee writes that, "of all causes mentioned as contributing to the financial depression of the cotton raiser, the want of reliable labor is perhaps the most important and the most difficult to remedy."³ The difficulties which arise from this source are more noticeable in those parts of the South where cotton cultivation is in a large measure dependent on negro labor. It is commonly supposed that the cultivation of this

¹ Holmes, "The Peons of the South." *Annals of the American Academy of Political and Social Science*, IV: 270.

² Hon M. L. Stansel of Carrollton, Pickens County, Alabama, in Report of Senate Committee, I: 312.

³ I. H. Wimbish of Cuervo, DeWitt Co. *Ibid.*, I: 362.

staple is mainly carried on by colored labor, as was the case in slavery days. But in an earlier chapter¹ we have shown that the tendency during reconstruction days was toward an increase of white labor in the cultivation of this plant. By 1876 thirty-nine per cent. of the laborers in the cotton fields were whites. While statistics are not available for showing the rate of increase there is no doubt but that the proportion of whites engaged in the cultivation of this staple has steadily increased since 1876. Mr. Tillett estimates that white labor produced in 1883 forty-four per cent. of the cotton crop; in 1884, forty-eight per cent., and in 1885, over fifty per cent.² Reckoning on a gain of two and one-half per cent. annually, Otken came to the conclusion that "the cotton produced by white labor in 1893 is about seventy per cent. of the entire crop."³ But, without relying too much on these individual estimates, the fact that in Texas the cotton crop has more than doubled in the last two decades, while the increase in white population for the same period has been more than twice that of the blacks, is an indication if not a certain proof of the increase of white labor in cotton cultivation.

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³ "Ills of the South," 246.

⁴ Otken, *Op. Cit.*, Chapter XII. Van de Graaff, "The Unaided Solution of the Southern Race Problem." *Forum*, XXI, 330.

of lower Georgia, the thrifty white labor has pushed the blacks off the plantations into the turpentine forests, or to engage in railroad building; and it is also true that in the outskirts of most of the southern cities and towns there has been a congregation of negroes who by means of "odd jobs" in the towns have been able to maintain a hand to mouth existence. But it cannot be said that as a class the negroes are leaving the farms in large numbers to engage in other industrial pursuits,¹ or that they have shown that marked preference for urban life that has characterized both the foreign born and native white population of the United States during recent years.

Mr. Van de Graaff's excellent detailed study of the geographical distribution of the black race in 1890² has failed to show any radical change from the conditions prevailing in 1860, when, with few exceptions, the large negro populations were to be found in the chief cotton producing counties of the South.³ The negroes still remain agricultural laborers in the cotton belt and the tendency for the country people to drift into the cities has probably affected the blacks less than any other class of the population.⁴

But it is equally true that the negro has not deserted cotton culture in order to grow other crops. His preference for cotton is as great as it was in slavery days or during the early years of freedom. In fact, the tendency

¹ Hoffman, "Race Traits and Tendencies of the American Negro," *Publications of the American Economic Association*, XI: 251.

² *Loc. Cit.*, 330.

³ See above, p. 61, map.

⁴ In the fourteen cities in the ten cotton states which had over 25,000 inhabitants each in 1890, the increase in the white population since 1880 was 45.44 per cent.; of the colored population 41.31 per cent. Birmingham, Ala., is not included in this number, because separate returns were not made in 1880.

which existed previous to the war for the blacks to congregate on the rich cotton lands of the river bottoms and to leave the hill country to the whites, has continued since the negro has been free to control his own movements. In the so-called "delta region," bordering on the Mississippi, Yazoo and Red rivers, the blacks comprised in 1890, 68.71 per cent. of the entire population; their rate of increase during the preceding decade being 20.59 per cent., as compared to a white increase of 14.58 per cent.¹ The comparatively small white population in this region is largely due to the malarious character of these alluvial lands. The negroes stand the climate better, and as a result the large planters in this region give them the preference as agricultural laborers.

We may look at the question as to the efficiency of the negro labor for cotton culture from two standpoints. Is his labor as valuable as that of the white man under the same circumstances? Is his labor improving? The facts already mentioned seem to furnish a negative answer to both questions. Not only has there been an increase in the proportion of whites engaged in the cultivation of cotton, but a corresponding increase in the production of this staple has taken place in precisely those regions where the increase of white labor is most noticeable. Mr. Hoffman² has pointed out the fact that in Mississippi, where the proportion of blacks to the white population has almost steadily increased since 1860, the production of cotton has

¹ Van de Graaff, *Loc. Cit.*, 334-5. The theory has been advanced that this portion of the South may come to form a negro state into which will be gathered the majority of the blacks in the United States, and that these blacks left to themselves, will relapse into barbarism. Von Waltershausen, "Negerfrage," "Handwörterbuch der Staatswissenschaften." Erster Supplementband, 649.

² *Op. Cit.*, 261.

actually shown a falling off, while in Texas, where the proportion of colored to the white population has decreased fifteen per cent. since 1860, the production of cotton is seven times as great as in the earlier year. The white farmers who cultivate the sea-land cotton in Georgia raise three or four times as much per acre as do the blacks who raise the same variety a little farther to the south in Florida. These indications of the inferiority of the negro labor in cotton culture are confirmed by the statements of southern planters from almost every portion of the cotton belt. The fact is further proven by the wages paid to colored labor, when these are compared with the wages received by white men employed in the same pursuits.¹

The only exception to this general preference for white labor comes from the "delta region." Here the negro is generally preferred to the white man for cotton cultivation. The preference, however, is not due to the greater efficiency of the black man, for here as elsewhere wages of white labor are higher. But the malaria in this region affects the negroes less than it does the whites, and negro labor is accordingly more steady and reliable. Negro labor is also much cheaper, for the negro's lower standard of living allows him to dispense with many things which seem indispensable to the white man. The latter demands a good house, stoves, and a diversified diet, while the negro seems content with a log cabin and a fire place, and with corn, bacon and molasses as articles of food. The superiority which this region possesses for cotton raising and the advantages which it has for negro labor, make it certain that a considerable portion of the cotton crop will for years to come be cultivated by negro labor.

¹ Hoffman, *Op. Cit.*, 265.

But Texas' superiority in cotton raising is not due entirely to her soil and climate. Her people are, without question, more thrifty, more hopeful and more progressive than the residents of the older states. In 1860 Texas was still a new state, just beginning to feel the touch of slavery. The war bore on her people less heavily than on those east of the Mississippi, and she had less to lose by emancipation. The negroes were always in a minority in this state, and their proportion has been steadily decreasing since the war. The number of blacks engaged in the cultivation of cotton is comparatively small, and it seems probable that this number is decreasing,¹ although no definitive statement can be made to that effect. Texas has been to some extent an exception to the rule that the cotton states have failed to attract any considerable number of the foreign born population of the country. Although the increase in foreign born has not quite kept pace with the increase of native born, Texas has received a considerable addition to her population from this source in the last thirty years.² She has also gained large numbers of immigrants from the northern states. The quality of her labor has as a consequence steadily improved in most parts of the state, and probably this, as much as cheaper and more fertile lands, has given Texas her present advantage over other cotton states. Her more intelligent and efficient labor has enabled the cotton growers to take advantage of any improvements in implements or methods that have been made.

From the estimates furnished the Senate Committee on Agriculture, it would seem that cotton can be produced in Texas at from 1 ½ to 2 cents a pound cheaper

¹ Report of the Senate Committee on Agriculture, I : 354.

² Compendium of Eleventh Census, I : xcii.

than it can be raised in the eastern states.¹ The cotton growers of Texas have not become victims of the crop lien system to the extent that their competitors in other states have, and it is worthy of note that whatever reduction in the acreage and production of cotton has taken place in recent years as a result of low prices, has for the most part been effected in Texas. The reports of correspondents of the Senate Committee on Agriculture show that with few exceptions the cotton growers of Texas are in much more favorable circumstances than are those elsewhere,¹ and in the case of these exceptions, the bad conditions are usually attributed to the failure of the farmers to raise their own supplies and to diversify their farming. A correspondent from Van Zandt county writes as follows: "Twenty years ago cotton raising in this county was an exception to the rule, and then our people were universally prosperous; ten years ago cotton raising became general, and the system of crop mortgages among farmers came with it, and now the mortgage system is nearly as general among farmers as cotton raising. Now cotton raising and crop mortgaging are practically synonymous terms."²

But if it can be shown that the increase in the cotton area and production in recent years has come almost entirely from the region beyond the Mississippi, it does not follow that the cotton growers of the older states are not responsible for over-production and low prices. Prudence and their own experience should have taught them that they could not compete with the western farmers in the production of this staple. The farmers of the New England and Middle states have felt the effects of a similar competition on the part of the wheat growers

¹ Report of the Senate Committee on Agriculture, I : 351-71.

² *Ibid.*, 370.

of the Northwest, but they have adjusted themselves to the changed conditions. "The farmers of New York have greatly decreased the relative production of wheat and other staples adversely affected by changing railway rates, and have increased that of hay and potatoes, but little modified in that way. It is otherwise in most of the Gulf states of the South. They still rely upon the old staples which like wheat have been lowered in value at the seaboard by changed cost of transportation, and such staples as cotton, that by greatly increased production have over-stocked the market and thus fallen in price. The farmers in such states suffer the full effect of the losses by modern economic changes affecting the price of agricultural staples."¹ Instead of maintaining and seeking to increase his cotton acreage, the farmer east of the Mississippi should have reduced his acreage in cotton as rapidly as possible, increasing that of other crops, and raising cotton, if at all, as a surplus crop. The farmer can scarcely plead ignorance as an excuse for not having done so. For sixty years or more, southern agricultural writers and speakers have besought him to raise his own food supplies, and the practice of his more prosperous neighbors has furnished him with an example of the practicability and wisdom of so doing. As early as 1875 the commissioner of agriculture of Georgia showed that allowing for only a very moderate yield of corn and cow peas, the raising of these two staples would have yielded the farmer a net profit of \$8.32 per acre, while cotton, then selling at 15 cts. per pound on the New York market, gave a net profit of only \$4.52 an acre.² In reading over the re-

¹ L. G. Powers, Fifth Biennial Report of the Bureau of Labor of Minnesota, (1895-96), p. 399.

² Second Annual Report of the Commissioner of Agriculture of Georgia, 135.

ports of the correspondents of the Senate Committee on Agriculture, one cannot but be struck with the practical unanimity with which these practical men whatever be their own theories as to the cause of low prices have asserted that those farmers who raise their own supplies have prospered, while their neighbors who raised cotton exclusively are in desperate circumstances. An Alabama planter sums up the general verdict when he says : "As a rule cotton raisers are prosperous in proportion as they grow their supplies on the farm."¹

In justice to the cotton growers it should be said, however, that the majority of them have in recent years, been unable to exercise their own discretion as to what staples they should cultivate. The crop lien system has taken away their industrial freedom and made them dependent on the merchants for the food and provisions which they might otherwise have raised at home. "Cotton raising has grown to be a necessity more than a choice. As a general rule, supplies cannot be obtained from the merchants on any other crop than cotton ; consequently they are forced to raise it to get credit."² It is the system of agricultural credit, therefore, to which in the last analysis must be referred the cause of over-production of cotton and under-production of food crops.

Uneconomical methods of production and bad farm management are not the least among the causes which have contributed to the financial depression among cotton growers, and they have been an indirect cause if not a direct one of the excessive planting of this staple. Cotton is the "lazy man's crop" in the South, although it is an expensive one to produce. In no one way has

¹ Report of Senate Committee, I : 308.

² *Ibid.*, 317. Cf. H. Hammond, "The Culture of Cotton," *Loc. Cit.*, 268 ; H. C. White, *Loc. Cit.*, 175.

lack of economy contributed more to its over-production than in the purchase of commercial fertilizers. There can be no question of the benefits which the South has derived from the finding of rich deposits of phosphates and marl in various portions of her territory, which have been utilized only since the Civil War. In many localities the use of fertilizers is indispensable to the profitable production of cotton. A South Carolina farmer writes: "Most of our land without the aid of fertilizer would produce about one-fourth of a bale the first year, and in the course of a few years would not produce over one-eighth or one-tenth of a bale per acre. Without fertilizer we would have to quit planting cotton."¹ But the expense incurred for commercial fertilizers is a heavy one, usually ranging from 12 to 33 per cent. of the total value of the crop, depending on the amount applied as well as on the price of cotton, and this expense could usually be partly if not entirely saved by preserving and using barn-yard manures or home made composts. The commercial fertilizers are almost without exception bought on credit and seldom used on any other than the cotton lands. They are usually placed in the center of the ridge where they feed the cotton, but do little to bring up the fertility of the soil.²

There is a noticeable lack of economy in many other respects on the majority of southern plantations, although southern planters are not the only ones who are guilty of this charge. Many of the cotton growers

¹ Report of Senate Committee, I: 293; Cf. H. C. White, *Loc. Cit.*, 172 ff.

² It is still a disputed question as to whether commercial fertilizers should be broadcasted or applied in the drill. See White, "The Manuring of Cotton," in "The Cotton Plant," Bulletin No. 33, Office of Experiment Stations, Dept. of Agric., p. 189.

have no gardens and still many more keep no live stock except their work animals. Better implements have come into almost general use within the last twenty years, but these are often left unhoused when not in use and in a few years are "worn out." "There is a neglect and want of thrift which are a burden in themselves. The farmer is not willing to lend a hand to delay the dilapidation of his buildings. The plow is left at the end of the last furrow until the next year; a few nails or screws would save dollars of loss or of eventual credit with the merchants in scores of places."¹ There is far more truth than is generally appreciated at the South in the sentiment of an Alabama planter who writes: "I am unable to say that this depression or distress is produced by causes coming from the action or non-action of Congress or of our state legislatures. The trouble arises from bad management and want of proper economy at home."²

In discussing the causes which have produced the agricultural depression in the cotton states, too much emphasis cannot be laid upon the inefficiency and unreliability of agricultural labor. A Texas correspondent of the Senate Committee writes that, "of all causes mentioned as contributing to the financial depression of the cotton raiser, the want of reliable labor is perhaps the most important and the most difficult to remedy."³ The difficulties which arise from this source are more noticeable in those parts of the South where cotton cultivation is in a large measure dependent on negro labor. It is commonly supposed that the cultivation of this

¹ Holmes, "The Peons of the South." *Annals of the American Academy of Political and Social Science*, IV: 270.

² Hon M. L. Stansel of Carrollton, Pickens County, Alabama, in Report of Senate Committee, I: 312.

³ I. H. Wimbish of Cuervo, DeWitt Co. *Ibid.*, I: 362.

staple is mainly carried on by colored labor, as was the case in slavery days. But in an earlier chapter¹ we have shown that the tendency during reconstruction days was toward an increase of white labor in the cultivation of this plant. By 1876 thirty-nine per cent. of the laborers in the cotton fields were whites. While statistics are not available for showing the rate of increase there is no doubt but that the proportion of whites engaged in the cultivation of this staple has steadily increased since 1876. Mr. Tillett estimates that white labor produced in 1883 forty-four per cent. of the cotton crop; in 1884, forty-eight per cent., and in 1885, over fifty per cent.² Reckoning on a gain of two and one-half per cent. annually, Otken came to the conclusion that "the cotton produced by white labor in 1893 is about seventy per cent. of the entire crop."³ But, without relying too much on these individual estimates, the fact that in Texas the cotton crop has more than doubled in the last two decades, while the increase in white population for the same period has been more than twice that of the blacks, is an indication if not a certain proof of the increase of white labor in cotton cultivation.

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of lower Georgia, the thrifty white labor has pushed the blacks off the plantations into the turpentine forests, or to engage in railroad building; and it is also true that in the outskirts of most of the southern cities and towns there has been a congregation of negroes who by means of "odd jobs" in the towns have been able to maintain a hand to mouth existence. But it cannot be said that as a class the negroes are leaving the farms in large numbers to engage in other industrial pursuits,¹ or that they have shown that marked preference for urban life that has characterized both the foreign born and native white population of the United States during recent years.

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² *Loc. Cit.*, 330.

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¹ Hoffman, *Op. Cit.*, 265.

It is generally conceded at the South that not only are the negroes less efficient laborers than they were under slavery, but that the best workers among the blacks are ex-slaves, men and women now perhaps sixty or seventy years of age, who under slavery had been trained in the methods of cultivating cotton and have not under freedom entirely lost their skill in this direction nor become victims of idleness. "It takes on an average to-day two negroes of the old class to do as much as one did formerly, three of the class of young men to do the work that one did in a former period, and five women of this latter class to do the work of one in past time. There are worthy exceptions in these groups, but they are few. The equation resulting from the character of this labor may be thus expressed: the work of three negroes in 1860 equals the work of ten negroes in 1890."¹

The freedmen and their descendants are generally lacking in energy and ambition. They possess none of the qualities which are found in all progressive workers. Their labor succeeds only when it is subject to constant supervision. On the big Mississippi plantations an authority little short of compulsion is often exercised by the managers, and in such cases the negroes are fairly successful laborers. But poorer farming can scarcely be found than on those numerous plantations in the South where the absentee proprietor has rented out his land to the negro "cropper" and has left the latter free to conduct the farming in his own way. There are to be found in every southern community negro farmers who are prosperous, respected citizens, and whose agriculture is fully on a par with that of their white neighbors. They prove the possibility of the negro attaining economic independence and prosperity where he is industri-

¹ Otken, "Ills of the South," 238.

ous and saving. But these men are only the notable exceptions to the general rule of negro idleness and shiftlessness. The majority of the freedmen will not work unless compelled to by dire necessity; they spend all their surplus earnings for useless luxuries as soon as they are paid, and they are hopelessly content with a bare subsistence.

The negro's preference for cotton, and his apparent inability to raise other crops, have contributed not a little to over-production of the white staple. "It is, indeed, a commonplace in the South that the negro can only grow cotton—that he cannot grow corn. Corn will not bear neglect; to fail to plough at the proper time means loss of the crop. Though cotton must be worked much more, it bears the delays incident to negro methods much better."¹ In spite of falling prices, therefore, the negro continues the cultivation of this staple. The "cropping system" facilitates this and the "credit system" often compels it, but neither the "cropping system" nor the "credit system" would have proved such serious obstacles to the reduction of the cotton acreage had it not been for the natural preference for cotton felt by so large a proportion of those engaged in its cultivation.

In the cultivation of cotton the negro women seem to participate in a much less degree than they did in slavery days. They still form an important addition to the labor force in picking time. But their evident desire to live as do the white women has generally caused them to shun out-door employments, and the quality of their work has deteriorated even more than that of the men.

Closely connected with this question of negro labor

¹ Van de Graaff, *Loc. Cit.*, 340.

is the problem of land tenure in the cotton states. During the period of industrial reconstruction we saw that the failure of the planters to secure steady labor from the freedmen, under the wage system, led to the abandonment of this method of farming, and to the adoption throughout the greater part of the cotton belt of the "share" or "cropping" system—a plan aptly described by Mr. J. R. Dodge as "a partnership in which labor wrought without hire and capital was advanced without security."¹ This mode of tilling the cotton lands still continues at the South, and while the following table compiled from the returns of the Tenth and Eleventh Censuses² shows a slight decrease in the percentage of farms cultivated on the share system in some of the states, in the leading cotton states, especially those where negro labor is largely employed, it is seen that the "cropping" system has more than held its own.

TENURE OF FARMS IN THE COTTON STATES.

States.	Percentage Cultivated by Owner.		Percentage Rented for Fixed Money Rental.		Percentage Rented for Share of Products.	
	1880.	1890.	1880.	1890.	1880.	1890.
North Carolina . . .	66.55	65.86	5.48	5.93	27.97	28.21
South Carolina . . .	49.69	44.72	23.41	27.75	26.90	27.53
Georgia	55.15	46.46	13.39	17.19	31.46	35.35
Florida	69.11	76.37	15.14	11.50	15.75	12.13
Alabama	53.15	51.43	16.85	24.68	30.00	23.89
Mississippi	56.22	47.16	17.14	21.04	26.64	31.80
Louisiana	64.78	55.62	13.81	16.95	21.41	27.43
Arkansas	69.09	67.89	10.50	13.21	20.41	18.90
Texas	62.41	58.13	6.94	8.80	30.65	33.07
Tennessee	65.47	69.16	11.63	11.33	22.90	19.51

More noticeable than the increase in the number of farms cultivated on shares, is the decrease in the per-

¹ Report of Commissioner of Agriculture for 1876.

² Tenth Census of the U. S., Volume on Agriculture, p. XIII.
Eleventh Census of the U. S., Volume on Agriculture, pp. 118-120.

centage of those cultivated by owners, which appears in all the leading cotton states.¹ This decrease is not an absolute one, however, for in all the cotton states the decrease which has taken place in the average size of landed properties has been accompanied by an increase in the number of those cultivated by owners, as well as in the number of those farmed by tenants. It is not easy to explain the greater increase in the number of rented farms, especially when one considers the low selling value of southern farming lands and their relatively high rental value. The negroes do not seem to have acquired land in recent years to any appreciable extent, while the facilities for renting land have increased the number of negro "croppers." Perhaps it is not to be regretted that the majority of the negroes, in their present state of efficiency, have not acquired ownership of land; for, as Mr. Hoffman says, "As a rule their 'farms' are such in name only, and the cultivation of the soil and the condition of the grounds, are of the lowest order. The value of the negro as an agricultural laborer becomes impaired. The small produce of his farm, together with the earnings of his wife and children in peanut or strawberry season, enable him to live in comparative comfort, adding little or nothing to the aggregate wealth of the community."² But if the choice lays between negro ownership and negro tenancy, the advantages of the former to society far outweigh those of the latter. The negro's cultivation of the land

¹ "The decrease in the average size of farms, the multiplication of very small farms, and the decrease in the occupancy of farms by their owners, stand parallel to each other and parallel also to a large extent, but not wholly, with the increase or decrease of the percentage of the colored population in the several localities." H. Hammond, "The Culture of Cotton," *Loc. Cit.*, 249.

² Hoffman, "Race Traits and Tendencies of the American Negro," *Loc. Cit.*, 269.

as a tenant is even worse than as an owner. His dependence on the merchant is much greater, and there is the additional dependence on the land owner. Land owning has stimulated the ambition of some negroes and has caused them to carry out agricultural improvements. And while the majority of negro cultivators are not yet in a condition to make the best use of the land if ownership in farming property were suddenly conferred upon them, it may be said that the fact that a freedman has accumulated enough capital to buy a farm, is evidence that he will be able to manage it with considerable prudence and economy.

As regards the "share system" or "tenant system," (for some writers¹ draw a distinction between the two,) there is a unanimity of opinion among writers on the subject as to its present unfitness and its deleterious effects upon both the worker and the soil. The tenant is interested only in the crop that he is raising, and makes no effort to keep up the fertility of the land, by means of careful cultivation, judicious fertilizing and the rotation of crops. Cotton is always the preferred crop to the land owner, because he is able to secure larger rents than he could in cash, and because there is less danger of a complete failure of the cotton crop than would be the case if other crops were planted; while the cotton has the additional advantage of always find-

¹ As, for example, Van de Graaff, *Loc. Cit.*, 339-40, and Pitt Dillingham, "Land Tenure Among the Negroes," *Yale Review*, V: 190-206. By share system these writers mean "a species of agricultural partnership in which the land owner furnishes land, tools and stock, and the laborer feeds himself and takes the crop." By tenant system they refer to the renting of the land by the tenant "as an independent contractor, the master of his own time," and following his own methods. The distinction is, at best, only a theoretical one, for all possible combinations of these two systems have existed since the war and still continue to exist in the leading cotton states.

ing an open market and a ready sale. The tenant also prefers cotton, partly because it bears neglect better and gives him more time for fishing and camp-meetings, and partly because he is able to live on the crop in advance of its harvesting, owing to the credit which it gives him at the store.

The whole tendency of the share system, therefore, is to encourage wasteful methods of cultivation, diminish the fertility of the soil, increase the number of crop liens, cause over-production of cotton, foster the natural inclination of the negroes to remain idle, and it is, doubtless, largely responsible for that curious phenomenon of southern agriculture—the fact that the rental value of the land is often equal to from one-half to the total selling value.¹ “The tenant system of farming has proven more wasteful and destructive than slavery ever was anywhere. The productiveness of the lands has been lowered, buildings have undergone great deterioration, live stock has decreased in quantity and is of inferior quality; orchards and gardens have disappeared. Poverty and even destitution may be found where of old there was good living for all. The negroes have accumulated nothing; they are still living on the credit of the crop yet to be grown. In good times they have gotten but a subsistence; under the stress of hard times very many have been brought literally to the ragged edge of starvation.”²

There is no question as to the desirability of a change. The present system is entirely too bad to continue for any length of time. The only question is as to the direction of the change and the means of bringing it about.

¹ “Economic rent does not exist in this country.” H. Hammond, “The Culture of Cotton,” *Loc. Cit.*, 267.

² Van de Graaff, *Loc. Cit.*, 341.

CHAPTER VII.

THE REMEDY FOR OVER-PRODUCTION OF COTTON; CO-OPERATIVE CREDIT; OTHER AGRICULTURAL REFORMS.

The failure of recent writers on southern agriculture to come to any agreement as to the causes which have operated to produce the present agricultural and financial depression among cotton producers has necessarily resulted in a disagreement as to the remedy to be applied to the existing situation, or the direction to be given to agricultural reform. It is generally conceded that over-production of cotton is directly responsible for the low prices of that staple which have prevailed on the world's markets since 1890. But when it is attempted to go farther and explain the cause of over-production itself, and the means of preventing its occurrence in the future, there are found to be as many causes cited and preventive measures proposed as there are writers who make the proposals. The plans which have been proposed or attempted for ameliorating the condition of the southern farmer range all the way from mere agitation in favor of a reduction of the cotton acreage, and a recommendation to farmers to raise their own food supplies,¹ to a demand that

¹ Especially noteworthy in this connection are the systematic efforts which, for several years past, have been put forth by the Southern Cotton Growers' Association. This Association, presided over by the late commissioner of agriculture of Alabama, and with a vice-president in each state, has as its aim the raising of cotton prices by a reduction of acreage. Its work is by agitation. Speakers for the Association travel throughout the cotton belt, urging upon the planters the necessity of planting less cotton and more food crops. The work of the Association in recent years has been largely carried on in the region west of the Mississippi river, especially in Texas. There is a considerable difference of opinion among the cotton growers as to whether the Association has exerted any influence on cotton production.

the state shall interfere directly in this matter, and by the exercise of its taxing powers compel the planting of less cotton.¹ Plans for a remonetization of silver;² for the prevention of dealings in "futures";³ for the establishment of a "cotton planters' trust," to regulate prices and control production;⁴ for the lowering or total abolition of the tariff on cotton goods,⁵ and many other schemes have been devised for the solution of this problem, but none of them has as yet gained sufficient popular favor to secure its adoption.

There is not room in this chapter for a discussion concerning the desirability, practicability or efficiency of any of these plans which have been proposed for removing the difficulties which to-day confront the southern farmers. None of them, in my opinion, touches the true cause underlying the over-production of cotton. All of them which aim at the reduction of the cotton acreage presuppose it to be entirely within the power of the producer to determine for himself what crops he shall grow and how much of each.

Now from the account of the credit system and its in-

¹ The plan of Major Harry Hammond of South Carolina (see published address on "The Reduction of the Cotton Crop," delivered before the Beech Island, S. C., Farmers' Club, Aug. 1, 1891). The plan proposes a single tax on cotton according to acreage and requires the concurrent action of all the important cotton producing states in enacting and enforcing such a law.

² Report of the Senate Committee on Agriculture and Forestry, 53d Congress, 3d session. Report 986, Part I, pp. XXI-XLI.

³ *Ibid.*, VIII-XX.

⁴ The plan of Mr. John T. Roddey, a New York cotton broker. Mr. Roddey proposes the establishment of a cotton planters' "trust," with a capital of from \$50,000,000 to \$100,000,000, "subscribed entirely by the farmers of the South, and divided into as many shares as may be necessary, and small enough for every cotton planter to subscribe." *Columbia State*, Oct. 25, 1894.

⁵ Report of Senate Committee, *Op. Cit.*, v-VIII.

fluence on cotton production given in a preceding chapter, it will be seen that this view of the situation is erroneous. The majority of the cotton growers of the South are not in a position to decide for themselves what crops they shall cultivate. Insolvent, as every detailed examination made since the war shows many of them to be¹; dependent on the advancing merchants for their food supplies as well as other necessities of life, with their crops pledged before they are planted in repayment for these commodities, the southern farmers are usually unable to act independently in these matters, but must submit to the direction of the advancing merchant, and plant that crop which is likely to prove most profitable to the latter. For reasons already given, that crop is seldom other than cotton.

I do not mean to deny that there are other causes which tend to hold the southern farmer to cotton. I have already conceded this. Custom, the ready sale which this crop finds at all seasons of the year, and a strong speculative element based doubtless upon the monopoly for cotton production which the South possesses, have all contributed to give this staple an advantage over other crops in the mind of the southern farmer. The preference given it by the negro cultivators has also been mentioned. Nor would I claim that all those who plant cotton are subject to the dictation of the advancing merchant as to what crops they shall raise. In every southern community there are those

¹ See, for example, Loring and Atkinson, "Cotton Culture and the South, Considered with Reference to Immigration," 1869; the Reports of the U. S. Commissioner of Agriculture for 1867 and 1876; the reports of the special correspondents of the Tenth Census (1880) of the United States on "Cotton Production," Vols. VI and VII, and the Report of the Senate Committee on Agriculture and Forestry, 53d Congress, 3d session (1893), Report 986, Part I.

who plant cotton largely, almost exclusively, who do so deliberately, without any pressure from outside being brought to bear upon them to do so. But these men are in every instance the exceptional men, persons of more than the average business ability or foresight, or planters who, favored by exceptional circumstances, are enabled to raise cotton at a less expense than can their neighbors. Among these are many of the large planters, who, as we saw in the preceding chapter, often have advantages over the small producers in a better industrial organization, better and cheaper facilities for marketing, cheaper credit, and the ability to wait for a favorable market before selling their crop. In this class is also to be included the land owner who rents out his land for a share of the crop. He often obtains in this way a larger revenue than he would if the land were rented for cash, and as his investment is comparatively small, owing to the cheapness of land, his share of cotton, even at a low price of that staple, will yield him a considerable profit.¹

But after making all due allowances for this class of persons, for whom indeed the cotton problem does not exist, it remains true that the majority of cotton growers, including the greater part of the tenant farmers and small land owners, as well as some of the large planters, are bound to cotton by a law as inexorable as any ever promulgated by the most despotic of earthly governments; even more so, for legal enactments may be evaded, while the fiat of the advancing merchant must be observed or foreclosure and indigence will result. The first and great problem of southern agriculture to-day is how to enable these cultivators to escape from their peonage to factors and merchants and to attain a

¹ Patrick Walsh, "Agriculture in the South," *The Independent*, XLVII: 295.

complete industrial independence. When this problem is solved, the way to other agricultural reforms will be made possible, if not easy. Until it is solved, efforts to reduce the cotton acreage can meet with no more than a transient success.

The solution of this problem lies in the establishment and extension of a proper system of agricultural credit. Such a system, we have seen, the southern states do not now possess. The banking institutions in these states are too few in number, and are so organized and managed that agricultural borrowers can make little use of their loan features. The national banks cannot be established with a less capital than \$50,000, and this fact alone prevents their location in many southern communities where there is a scarcity of capital. Furthermore, the national banks are forbidden to loan money on landed security, and this prevents farmers who wish to make loans for a considerable length of time and have nothing but their land to offer as security, from having recourse to these banks. The existent loan associations often supply this deficiency, but on the other hand they offer no opportunity for short time loans which are the especial need of the southern farmers. Finally, the terms on which both the banks and the loan associations offer credit are such as to discourage borrowers, and to make repayment of the loans well nigh impossible.¹

Under these circumstances and amid these difficulties, it is possible that a clue to the credit problem in the

¹Two measures designed to supplement the existing credit institutions in the southern and western states were proposed during the last session (1896-97) of Congress. One proposed a system of "credit financier," similar to that in France, for making loans on landed security. The other measure proposed to allow the establishment in small places, of national banks with a capital less than \$50,000. See *Banker's Magazine*, July, 1897, p. 7.

South may be found in a study of the history and experience of the so-called "co-operative credit associations," or "peoples' banks," now flourishing in most of the countries of continental Europe.¹

Very little seems to be known concerning these institutions in either England or America, although both types of the associations now in existence were founded nearly a half century ago, and wherever established they have met with a success that has called forth encomiums from all who have studied their workings and witnessed their results. It is true that several books, pamphlets and magazine articles which describe these associations either in a general or detailed manner have appeared in English, and among a few professional economists and others who have made a study of the economic institutions of Europe the history and accomplishments of these institutions have long been familiar knowledge. But to the majority of the business and professional classes, even to the bankers themselves, the very existence of these associations is unknown. So far as I know, no attempt has ever been made in this country to secure agricultural credit by co-operation, although the readiness with which the American people have co-operated for other purposes, due, doubtless, largely to their habits of association formed by experience with local self-government, is a fact too well known to require more than mention. Co-operation for the purpose of purchasing credit had an early beginning in this country in the establishment of our building and loan associations, and it is remarkable that the success of these well

¹ An attempt is now being made to establish these associations in Ireland. The success of the experiment will be watched with interest. See Finlay, "Agricultural Coöperation in Ireland," *Economic Journal*, (British), VI : 210.

known societies has awakened in the mind of no one the idea of carrying on a similar work among the agricultural classes of the country.

It is not my intention to recite in the following pages the history of these associations, nor to attempt to describe in detail their methods of organization and management. Such information is easily available to the reader who desires to obtain it.¹ I shall here attempt only to outline a plan based on the experience of the European societies, which, if introduced, seems likely to aid in solving the vexatious problem of agricultural credit in our cotton states.

American conditions are so different from those which exist in any European country that any plan which has met with success there will doubtless require considerable modification before it can be made to conform to the needs and characteristics of the American people. But this fact need cause no apprehensions of failure. In whatever land these associations have been introduced from Germany, their original home, they have required changes (often seemingly radical ones) to meet their new environment. In spite of these modifications, the associations have shown a remarkable adaptability to new conditions, and when managed in a business-like manner have never failed to accomplish their purpose. Not infrequently, indeed, the engrafted sprout has proven hardier than the original tree. Perhaps the

¹ Among the works in English which describe these associations are Henry W. Wolff's "Peoples' Banks," (London, 1893,) a full and rather enthusiastic account of the coöperative movement in Europe; Edward T. Peters' "Coöperative Credit Associations in Certain European Countries," (Department of Agriculture, Washington, 1893), less complete but more conservative in tone than Wolff's book; R. T. Ely's "Coöperative Credit Unions in Germany," *Atlantic Monthly*, February, 1881, and an English Blue Book for 1886. A bibliography of the foreign literature is to be found in Wolff.

associations which come nearest to meeting the requirements in our own case are the *Banche Popolari* introduced into Italy by Signor Luzzati, for the conditions which prevailed in Italy previous to the introduction of these associations seem strangely similar to those which exist in the southern states to-day, while the greater familiarity with banking operations possessed by the Italians enabled them to dispense with many of the cumbrous devices of the German associations.

The end and purpose of all these associations is, in the words of Schulze-Delitzsch, one of their founders in Germany, "to procure capitals without a capital of guarantee," or, as it is still better expressed by M. F. Passy, "to find means for giving credit to those who have no security to offer in exchange."¹ To accomplish this, at first sight, impossible feat, neither the aid of the state nor maintenance by the philanthropist is invoked. The plan savors in no way of paternalism, nor does it partake of the nature of a charitable or benevolent scheme. The forces on which it relies for success are honesty, self-help and mutual aid. "It is," said the late Leon Say, "the most effective weapon against the development of socialism."²

The first question which naturally arises in connection with these societies, is that concerning their membership and methods of organization. As the chief purpose of the associations is to furnish loans to borrowers who are unable to secure credit through the ordinary channels of trade, and as the best managed and most successful of these associations limit borrowing to their own members, it follows that the members will for the most part be from the poorer classes of the commu-

¹ Quoted by Wolff, "Peoples' Banks," 23.

² Wolff, *Op. Cit.*, 12.

nity. It is needless to say that these members must have a reputation for honesty, and that the most careful discrimination must be exercised in their selection. Now, from what has been said regarding the absence of this moral quality in a large number of the cotton growers, especially those of the colored race, it may be inferred that credit associations based on a co-operation of members would fail of success among these people. This is undoubtedly the weakest spot in the plan. I am obliged to admit that a large number of those cotton growers who stand most in need of credit have neither the moral nor the business qualifications for membership in such associations as the ones proposed. Nor is it surprising that such is the case. Under slavery the negro lacked property rights himself and naturally concerned himself very little about the property rights of others. Accustomed to consider everything on the plantation not required for the direct consumption of the master and his family as subject to his own use, it is not strange that after emancipation the freedman should have failed to grasp the distinction between "mine and thine," or to understand the necessity of fulfilling his moral and legal obligations.

But while a large proportion of the negro cultivators would thus be debarred from membership in such associations, and could not come under the direct influence of these societies, and while it is possible that even the not inconsiderable number of thrifty and honest freedmen would, because of lingering race prejudices, be unable to co-operate with their white brethren in the establishment and management of credit unions, it does not follow that these banks could not be established in the South, or that they would exert no influence in reducing the cotton acreage. The majority of the people

in the South are whites, and their general reputation for honesty is as high as that of any people in the world. The proportion of whites engaged in the culture of cotton has been constantly increasing and their total number must now greatly exceed the total number of blacks so employed.¹ Although they include the large planters and many independent farmers who stand in no great need of credit, the majority of the whites are small land owners or tenant farmers who are in exactly the same position with respect to present opportunities for procuring credit on reasonable terms as are the negro cultivators. These small white farmers largely predominate in numbers in some sections of the South, as in upper South Carolina and Georgia, northern Alabama, northern and eastern Mississippi and in certain portions of Arkansas and Texas. In other sections of the South they form, if not a majority, at least a respectable minority of the inhabitants. Their honesty and industry are highly commended by those who are acquainted with them and have had business relations with them. Their misfortune is that they were deluded by the high prices of cotton in reconstruction days into raising this staple exclusively, and that a continuation of this policy has made them victims of usury, until there seems to be no avenue of escape open to them. It is in such communities as these that co-operative credit would meet with signal success. It is this class of farmers from whom southern agriculture has most to expect. The opportunity which a release from the control of the advancing merchants would give these farmers, would, it is believed, be grasped by them to reduce their cotton acreage, diversify their farming and improve their land. By the

¹ In 1893 the proportion of cotton raised by white labor was estimated at 70 per cent. Otken, "Ills of the South," 245-6.

reduction of the cotton acreage which would thus be brought about, and the consequent rise of prices, the condition of those farmers who from necessity or preference continued to plant cotton, would also be bettered.

But this would not be the only indirect benefit that would result. For it has been one of the great blessings of these institutions that, wherever established, they have served not only the direct needs of their own members, but have stimulated thrift and honesty in those of the community who had hitherto lacked such qualities. The fact that they are debarred from membership in these associations and cannot share in the advantages furnished thereby, brings home to these morally deficient the lesson that honesty is the best policy, and causes them henceforth to endeavor to make themselves worthy of membership. What a lesson might these associations not bring to the negro? teaching him that honesty, industry and frugality form the basis of all prosperity. Eager for social advancement as this race is, and quick in imitating any habit or custom of the white race which seems to point in this direction, the negro might indeed be the greatest gainer by the introduction of these institutions, and if so, not only he but the whole South would have profited thereby.

The necessarily long discussion concerning the moral qualifications for membership has drawn us away from the point with which we began, viz., the class of members whom it would be advisable to endeavor to secure for these associations. Now while the purpose of the association should be to benefit the less prosperous members of the community, and the great number of those belonging to such associations should, therefore, be from this class, it is neither necessary nor advisable

that they should all come from this class. It is true that Schulze-Delitzsch did not emphasize this fact, for the associations which call him their father are, after all, rather "compulsory savings banks" than "credit associations,"¹ and according to their terms of organization and management they do not require the same conditions for membership as those societies which are entirely or mainly loan associations. Both Herr Raiffeisen, the founder of the German "loan banks," and Signor Luzzati, who introduced with modifications the Schulze-Delitzsch "credit associations" into Italy, urge strongly the necessity of securing as members of the association a considerable number of the more prosperous members of the community.² These not only lend financial stability to the institution and increase the confidence of money lenders in it, but they also furnish a class of men whose superior business judgment and experience are most valuable in the questions of organization and management. The advantage of having this class represented in the membership is particularly great at the time of introducing these institutions into a new country or community. At such a time, when capital would be timid about entering this new field for investment, these men, because of their wide business acquaintance and well known financial responsibility, would doubtless be of great service to the associations in securing loans. It is not unlikely that they would themselves be able and willing to advance the first funds needed by the banks and their own example in so doing would act as a guarantee of safety to others.

It may be asked, what are the inducements which

¹ Wolff, "Peoples' Banks," 48.

² In Italy these members comprise about 25 per cent. of the total number of members in the associations.

would lead this class of men, who do not themselves need the aid furnished by the banks, to become members of these associations? First, philanthropic motives which always animate the minds of a large proportion of the well-to-do citizens of any country, stimulating them to efforts in behalf of the community in which they live. Probably no better field for the exercise of such motives could be found than among the large planters of the South. Long accustomed to leadership in all the political, business and social affairs of the community, imbued with a spirit of helpfulness which their control over the affairs and earthly destiny of others taught them to exercise during slavery days, taught finally by their own struggles and discouragements during the years of reconstruction how bitter is the curse of poverty, these men would not lack, nor have they ever lacked the willingness to help their poorer neighbors along the road to prosperity and industrial independence. A second motive which might influence the more prosperous members of a community to join these associations may be found in the fact that these men, while not lacking in the means of obtaining credit on reasonable terms for a considerable period of time, might find these banks a convenient means of furnishing them with cheap credit for a few days or weeks. But the motive chiefly relied on for drawing these men into membership in the associations is the profit which would accrue to them in the shape of dividends. The policy of paying dividends is undoubtedly open to criticism, and has been rejected by the Raiffeisen associations and some others of the European credit societies. "Large dividends," as Wolff points out,¹ "must necessarily mean dear money to the borrowers." There is also the

¹ "Peoples' Banks," 97.

danger that the interest of the shareholder will be put ahead of that of the borrower, and the very purpose of the association thus be compromised. The only preventive against this is undoubtedly that which Luzzati has recommended—the placing of a limit on dividends. This is not only possible but even certain in all cases where the interest of the majority of the members is on the borrowing side of the institution, for with each shareholder having but one vote, regardless of the number of shares held by him, the wishes of the majority are bound to be attended to. It may be that the above dangers which lurk in the dividend practice could be avoided by the payment of no dividends, and still the coöperation of the wealthy members of the community be secured, but this is open to doubt, and if business men are to be solicited to enroll themselves as members in a professedly business organization, there should be some business motive cited as a reason for their so doing. For the same reason care should be exercised not to place the maximum limit to the probable dividend below that which would be the ordinary return to invested capital. Dividends as high and perhaps a little higher than the current rates of interest should be allowed whenever the profits of the institutions permit this to be done. This may seem a needless warning to many who may imagine that the profits of the association would never allow of even so high a dividend. Perhaps some of them would not, but among the German credit unions the annual dividends have often been above thirty per cent. and in at least one case they went as high as fifty-six and two-thirds per cent.¹

If we have dividends we must, of course, have shares. Whether they are advisable is another controverted

¹ Wolff, "Peoples' Banks," 52, 98.

question. The Raiffeisen "loan banks" in Germany had no shares until German law compelled them to do so. The Wollemborg "Casse Rurali" of Italy have no shares. In both these cases the banks have flourished, and it must be admitted that these are precisely the associations which have been most successful among the agricultural classes. Shares when made too large and payment of them demanded too rapidly discourage many from joining who have the greatest need of credit. Both the Raiffeisen and Wollemborg associations are, however, organized on the principle of unlimited liability, a plan of doubtful feasibility in this country, and they have, therefore, less need of shares to stand as a guarantee for loans. It may also be stated in this connection, that perhaps the chief reason why these associations which allow no dividends have been able, nevertheless, to secure the support of prosperous citizens in the community, is because they have laid upon them no financial burden in the form of shares. It seems to be generally conceded that where unlimited liability does not prevail, shares are a necessity. In behalf of shares it is to be said that privileges in this country are usually valued in proportion to what they cost their holders to secure them, and that to demand the taking up of shares would only increase the interest of members in the associations.

Having decided that we shall have shares, what shall be the value of each share? This is a question which must be decided with reference to local conditions. In some communities it may be necessary to fix the amount at a very small figure, perhaps ten dollars, or even five dollars. Some of the Italian societies have had shares as low as twenty *lire* (about two dollars). But in spite of the poverty of many of the cotton growers, it is doubt-

ful if the shares would often need to be fixed at such small amounts, especially if speedy payments are not demanded. Schulze-Delitzsch made his shares intentionally high (about \$150) in order to commit the members to a long course of saving, a desirable purpose to be accomplished in this country also.

Perhaps fifty dollar shares in three months' installments of not less than five dollars each, in addition to an entrance fee of five dollars, would not be too severe a burden to be borne by the farmers in most southern communities.

In regard to the number of shares which any one person should be allowed to assume, it may be said that this is of secondary importance, provided that members be limited to one vote no matter how many shares of stock they may hold. This is necessary in order that the wealthier members may not get control of the association, and by raising the rate of interest on loans in order to obtain higher dividends, limit unduly the borrowing, and thus destroy the very purpose of the association. There is no serious objection, however, to limiting the number of shares which any member may hold, if this be deemed advisable.

In regard to the number of members which should be admitted to an association there is also much room for elasticity. Some Italian writers have thought fifty or sixty to be the ideal constituency of one of these unions. On the other hand, the largest of the Italian societies, the *Banca Popolare di Milano*, had in 1889 16,392 members.¹ The number of members like the number of shares will need to be determined by local conditions. There seems to be no need for fixing any limit to the number who may join, provided the other conditions are

¹ Wolff, *Op. Cit.*, 149.

fulfilled. The question concerning the size of the district from which the association should seek to draw members is, however, of real importance. The Schulze-Delitzsch unions have no prescribed territorial limits for operations, but accept members from anywhere if they fulfill other conditions. The Raiffeisen "loan banks" and those of Italy, on the other hand, work within narrow territorial limits, such as a parish or township might be in this country. Small districts become a necessity when the banks attempt to exercise a control over the employment of the capital which they lend. In general it may be said that the Raiffeisen and Italian loan associations lend money only for productive purposes. The applicant for a loan must satisfy the committee of the association which attends to the granting of credit, not only of his trustworthiness, but that the loan is intended to be used for the improvement of his farm or for the direct carrying on of his agricultural operations. This is a feature which should certainly be adopted in this country should co-operative banking be introduced in our southern states. It not only gives an additional safeguard to the loan, but it is probable that in this way the banks might exercise a direct influence in the reduction of the cotton acreage. They probably should not attempt, as do the advancing merchants, to dictate what crops shall be grown, but by giving the preference to those customers who raise their own food supplies and make cotton a surplus crop, they might exercise an influence decidedly beneficial to the whole community.

When it is discovered that a man has misapplied the money borrowed, or used it for a different purpose than was contemplated when the loan was made, the council of supervision may call in the loan at four weeks notice. Likewise, if the security offered for a loan has depre-

ciated in value, the council may demand additional security, and if this is not forthcoming the loan is called in. To make this part of the plan operative the small district seems a necessity. The members are then acquainted with one another's business, and a member could not misapply his loan without his fellow members being aware of it, as would not be the case in large districts. As the members of the associations are the ones who would be the losers by the failure of any borrower to repay his loan, it follows that they will be the ones who will be the first to give notice in case the loan has been used for other purposes than that intended by the lenders. Each member thus acts as a check upon his fellow members. It must be noted, however, that the territorial limits must be much wider in this country than in Europe, owing to the sparsity of the population. It could only occasionally happen that a township would be a large enough sphere of operation. Often, perhaps, an entire county would have to be included. The natural location for one of these banks would be in the cities, towns or villages where the farmers do their trading, and the sphere of operation should be large enough to include all those trading at this market whose membership is desired.

The methods of organization of these societies can be briefly described. Having secured a sufficiently large roll of members, which needs not be a very large one at the outset (Wollemborg started his first association with 32 members), the members meet to elect officers. Of course in this land of constitutional government this step would be preceded by the adoption of a constitution defining in exact terms the duties of members and the limitations to be placed on the officers. The officers

of the association comprise, first, the executive committee, on whom falls the burden of administration. This committee consisting of three or five members does not occupy its whole time with the affairs of the association, but meets as often as exigencies require, perhaps weekly or bi-weekly. To it is confided the responsibility of electing new members to the association, passing on applications for loans, deciding on the acceptability of security, providing funds for the association, fixing the rates of interest and discount, etc., in fact, attending to all the needs of the association. In addition to this committee there is the council of supervision, consisting of from six to nine members, meeting every three months and more often if necessary. To the council is given the power of veto on all important transactions entered into by the executive committee, as well as the supervision of accounts. Candidates refused admission and members expelled or refused credit may take an appeal to this body. Next to the general meeting of the association held each year, this is the highest authority in the association.

In addition to these committees, there is the cashier selected by the council and entrusted with the care of the funds and the transaction of the business as determined by the association. He has no voice in the management, being a clerk purely and simply. He is the only officer who sits permanently and needs not be a member of the association. When a society is not too large nor its business too extensive, the cashier may be a man engaged in other employments, as secretary of a building and loan association, real estate or insurance agent or a bookkeeper for some mercantile concern, or possibly an attorney. A list of members to whom credit is to be furnished, together with the amounts and terms

on which it is to be granted, is furnished the cashier by the executive committee, and this list may be altered at the pleasure of the committee. The cashier is the only salaried officer in the association, and his salary need not be large, especially when he is engaged in other employments. If the members of the committee or council are paid, their remuneration should be determined by the number of days that they are actually employed. Some of the European associations do not offer any remuneration to their officers, with the exception of the cashier.

It is needless to say that all of the officers should be elected with the greatest care, and should include none but the most trustworthy and business-like of the members. No member of the executive committee should be a member of the council. When the district is large, an effort should be made to have all parts of it represented on both the committee and council, in order that these officers may keep well informed as to the habits and doings of all the members. It is desirable that the leading citizens and more prosperous members of the community should come to have a keen interest in the success of the associations, for the support of these men will often be of great value to the association. In electing the officers, therefore, care should be taken to have this class of members well represented on both the executive committee and the supervising council.

Having described the methods of organization, we are next confronted with the question,—Whence and how is the association to procure its funds? There are three sources. First, the shares paid in by the members themselves. This is obviously not an important source at the outset, though it may become one. Savings and deposits constitute another source. Not only the mem-

bers of the association, but all the residents of the community are invited to make the loan bank the repository of their funds. These deposits, as in ordinary savings banks, are withdrawable at the option of the depositor. In return for these deposits, the associations allow interest at low rates. It is the custom of many Italian coöperative banks to allow interest at a rate of one-half per cent. higher than that allowed by the public savings banks, and this fact, in addition to the natural preference which the people have shown for their own banks, has made the coöperative banks very successful savings banks, and has drawn to them large funds in this way. In our southern states the amount of capital which could be secured in this way would of course be much less than in Europe, owing to the small percentage of the wage earning class in the South. But in certain portions of the South where manufacturing industries have lately sprung up, as in the Carolinas and in northern Georgia and Alabama this alliance of the agricultural and wage earning classes might prove very profitable to both. The scarcity of banking institutions in the cotton states would give these coöperative institutions an opportunity for undertaking a wider scope of business than in other sections of the country where national, state and private banks are already well established.

But the third source of funds, and obviously, at the outset at least, the most important source, is borrowed capital. But it will be asked, what are the inducements that will lead people of wealth to lend to these institutions? What is the character of the security which they have to offer? First and most important of all is the honor and reputation of the members of the association—"capitalized honesty" of which Signor Luzzati speaks. Can an association of men, possessing but little

property, who in their individual capacity were unable to borrow capital, from the simple fact that they are now grouped together offer sound security for heavy loans? Strange as it may seem, we must answer in the affirmative. As Sir Robert Morier says: "The skilled artisans of a community are as good a subject for a mortgage as the steam mill which supplies it with flour or the broad acres which furnish the corn for the mill. All that is wanted is some equally safe means of assigning to the creditors a lien on the former as on the latter."¹ An association furnishes us the means of securing such a lien. The individual of well known honesty and business habits is often unable to make a loan because he has no property to stand as security. The lender requires security not because he distrusts the intentions of the would-be borrower, but because he fears that sickness, death, want of employment or other misfortunes may intervene and prevent the debtor from carrying out his intentions. But in the association such risk disappears or becomes insignificant. Nothing short of an epidemic will carry off the majority of the members at one time.

The principle is the same as that underlying insurance. To insure only one house would be a mere speculation, but when a large number is insured the losses suffered by the burning of a few houses are more than offset by the payments on the houses which did not burn. The risk is no longer a speculative one, but a business risk. The pledge of honor of an association of men selected with regard to their honesty and thrifty habits, is a security which no capitalist can afford to disdain. This guarantee of honor, this "capitalized honesty" secured by collective credit is almost the only security

¹ Wolff, *Op. Cit.*, 23.

offered by the *Banche Popolari* of Italy, and their success has perhaps been greater than that of any other of the coöperative associations of Europe.¹

But the pledge of the association is not the only guarantee offered to investors, even if it is the most important one. There are, of course, the shares of the members, increasing with each payment made and with every new subscription. There is also the reserve fund which every association should set about collecting as soon as it begins operations. The entrance fees and a certain percentage of the profits should in all cases be devoted to the building up of this reserve. In this way the reserve may become a source of great strength. It is the backbone of the Raiffeisen system, Wolff tells us, and it might easily become so in any system. In addition to these guarantees which rest wholly on the confidence in its stability which the association is able to inspire in the minds of the money lenders, the bank may hypothecate its own securities which it has received from its members such as bills of exchange, promissory notes and other forms of commercial paper, and especially crop liens, concerning which more will be said later. With the indorsement of the association, these bills and mortgages should possess great strength as means of drawing capital to the banks. Indeed, they have in other countries, especially in Italy, shown that they possess this power.

There is another form of security which has been offered by the German coöperative societies and the Wollemborg *Casse Rurali* in Italy, which has undoubtedly lent considerable stability to these institutions. This is the unlimited liability of the members. Each member becomes responsible, not only for his own bor-

¹ "Peoples' Banks," 75.

rowings, but to the full extent of his property for the obligations incurred by the association. This is a feature which is not likely to commend itself to Americans, and is one which has been rejected in some other countries where coöperative credit has been introduced. And even its warmest supporters have acknowledged that it is not indispensable to the success of the associations. In Austria-Hungary there are a large number of credit associations of both the Schulze-Delitzsch and Raiffeisen types which have adopted limited liability, and they seem to have succeeded as well as those based on unlimited liability. The Belgian *Banques Populaires* and the Italian *Banche Popolari* are also based on limited liability. The objections to unlimited liability are obvious. In an association where it is desirable to have a few rich as well as many poor members, any scheme which proposes to place the greater part of the responsibility on the richer members is not likely to prove popular in this country, in spite of the fact that the dangers from unlimited liability have not proven to be great in other countries. If the success of the "popular banks" was dependent on this provision, we might well despair of their ever being established in this country. But where the sale of shares is not rejected, there seems no good reason for demanding unlimited liability.

But while unlimited liability seems unlikely to meet with favor in America, it seems desirable to increase the confidence of money lenders in the association by fixing the liability of members at something more than the mere value of the shares of stock held by them in the association. Perhaps the rule adopted by the Belgian societies and the limited liability associations in Hungary would most nearly meet the need of American conditions, at least at the outset. These associations limit

the liability of their members to a fixed multiple of their shares. Thus, supposing the shares of the members were to be fixed at fifty dollars each, the liability of a member holding one share might be made two-hundred dollars, or four times the value of the share, while the member who for purposes of investment took up more than one share would have his liability increased in a commensurate manner.

Having established its own claim for borrowing, the association is next concerned with the amounts which it shall lend to its own members, and the terms on which these loans shall be made. These are practical details to be settled by the executive committee, subject to the limitations imposed upon it by the association at its annual meeting, or by the supervising council. It may be said, however, that any member may usually be allowed to borrow without security to the extent of the amount which he has paid in on his shares. Beyond this point security should be given, and the judgment of the committee must largely determine the amount which can be lent and the character and amount of security to be demanded.

There are three kinds of security which can be offered by agricultural borrowers: personal security, security on movables (chattels), and landed security. Tenant farmers, of course, are lacking in this third form of security.

As regards personal security, it may be said that this should be sufficient for the association, provided the amount of the loan required is not excessive when the circumstances of the borrower are considered. As the members of the association are supposedly honest, this being the indispensable condition to their admission to membership, any member desiring to make a loan should usually have no difficulty in securing the indorsement

of two or more of his responsible neighbors on his note of hand. Such is the form of security most usually employed in Europe by members of the coöperative societies, and we have already noted the fact¹ that in at least one section of the South this personal security is all that has been demanded by the national banks in making advances to farmers.

When for any good reason the farmer is unable to furnish personal security satisfactory to the association, there still remains open to him the possibility of furnishing real security in the form of pledges of personal property, liens on his crop, implements or live stock. It will no doubt be seriously questioned whether any association undertaking to carry on banking operations in a safe business-like manner can afford to take security of so precarious a nature as crop liens, especially as the time of borrowing usually antedates by several weeks the planting of the crop which is to be offered as a guarantee of repayment. Ordinary banking institutions certainly could not afford to do so. But there are numerous reasons why the coöperative banks may with safety accept as security that which ordinary banking establishments would be bound to refuse.

The dangers threatened are three-fold. First, that the borrower will not invest his loan as he agreed to do,—will not use his borrowed capital to put out a crop. Second, that the crop will prove a failure. Third, that the price of the crop will be less than was anticipated, and its total value not equal to the amount of the loan.

As regards the first danger threatened, it may be answered that the safeguards which the association has established to prevent abuses of the loan privilege by irresponsible borrowers should prove sufficient to prevent

¹ Above, p. 162.

any borrower from misapplying his loan. He could scarcely do so without his neighbors being aware of it, and it is to their direct interest to inform the management of any such irregularity, so that the loan may be called in. The danger arising from this source is no greater than that run by any of the European associations which loan only for productive purposes, and the experience of these associations has shown that this danger is insignificant.

The importance of the other dangers mentioned, the failure of the crop or a decline in its value, will largely depend on the nature of the crop to be taken as security. It is not proposed that any crop shall be taken as a guarantee for loans, for which there is not a constantly open market, and the course of prices of which may not be closely predicted. Nor is it proposed that any association shall lend to the full extent of the anticipated returns from the sale of these crops. A low maximum limit, say fifty per cent. of the anticipated value of the crop, might be established, at least for a few years until experience has had time to show whether or not a wider limit may be chosen. It might be well to accept as security only one crop, that of cotton. The facility for marketing this crop, and the possibility which the future delivery system affords of foreseeing changes in its price weeks and even months ahead of time, have made this crop known all over the South as the "cash crop," and explain the reason why merchants and factors are willing to make advances on it. Although one of the chief objects of these associations should be to aid in the reduction of the cotton acreage by preventing the necessity of raising this staple exclusively, still it is probable that the majority of the farmers will wish to raise cotton at least as a surplus crop, and if so, there

seems no good reason why the banks should not accept it as security for loans in the same way that the merchants now do, provided, of course, that too much is not loaned on this kind of security.

The loans made to this class of borrowers in the South are necessarily small in amount, seldom exceeding for the tenant farmers or small land owners one hundred dollars a year. A complete failure of the cotton crop is a rarity for individuals, and never happens to an entire community.¹ In spite of a remarkable mixture of good and bad seasons, the average yield per acre for the entire cotton belt has, for the twenty years ending with 1895, been between 145 pounds as a minimum and 223 pounds as a maximum, and usually a short crop has been partly if not entirely compensated for by higher prices.

Finally, it is to be said that in two given cases, experience has demonstrated that crop liens may safely be taken as security for loans. The first case is that of the merchants and factors of the South who for more than one hundred years have been loaning on this same kind of guarantee, and in many cases to borrowers who possess none of the virtues which we have made the indispensable conditions to membership in our proposed associations. The second case is that of the Italian Popular Banks, the most successful of all the European loan associations, and the very ones which seem best adapted to American circumstances. Noticing the conditions which confront the agricultural classes of all countries, of having little or no personal property which they can offer as security for loans, the promoters of agricultural credit in Italy obtained in 1887 legislation which gave to the tenant

¹ "The fluctuation in yield per acre, taking the country as a whole, is less in the case of cotton, than in that of almost any other product of the soil." C. W. Dabney, Jr., "Introduction" to "The Cotton Plant," *Loc. Cit.*, 15.

farmers and land owners of that country the right to offer their crops, implements and live stock as a guarantee for the loans offered by the coöperative credit societies.¹ No similar legislation is needed in our southern states, for the crop lien already exists there with the complete recognition and support of statutory law. All that is needed is some means of making this much abused instrument of credit a blessing to the classes it was intended to benefit, but whom, on the contrary, it has well nigh ruined.

Shall farming land be accepted as security for loans made by these banks? It seems to be a cardinal principle of American banking that land shall not serve as security for loans made by banking institutions, for it is assets which cannot readily be converted into cash wherewith to meet sudden demands. It is certain that it should not be taken as security for short time loans which the credit associations would be chiefly called upon to furnish. But it may be questioned whether it might not be accepted as security for long time loans, when these loans are made for the distinct purpose of making improvements on the property. It would seem that the added value given the land by these improvements would more than compensate for any possible decline in the value of the farming land. This form of security might certainly be employed if the southern states would provide such a system of land transfers as is secured by the Torrens system.

"If the artificial absurdities, inherited from the dark ages and feudalism, which enslave land even under this free government, and burden its transmission from one owner to another, could be abolished, if titles to this

¹ Peters, "Coöperative Credit Associations in Certain European Countries," 96.

species of property could be made commercial paper, and as convertible as the titles in property in railroads and factories are through bonds and stocks . . . that fundamental value, held to be the source of all others, land, would be free to furnish its full quota toward supplying human wants and assisting in human progress."¹

But even in the absence of this desirable reform, which would certainly do much to raise the value of farming land in the South, there seems to be no good reason why first class mortgage security should not be acceptable for long time loans when the money loaned is to be expended for farm improvements. The coöperative banks are not likely to be made the repository of call deposits to the extent that other banks are, and this fact lessens the danger of the bank being suddenly called upon to convert its assets into cash.

The length of the period for which ordinary loans should be made must be determined largely by the needs of the borrowers. In Europe, three months, with privilege of renewal for another three months, rather reluctantly given, seems to be the favorite length of time for short time loans. But this is too short a time for agricultural borrowers. In the cotton belt there is a demand for loans to run through the cotton season, for which six months might be considered the average length. The associations should, therefore, endeavor to make advances for this length of time, with provision for renewal for three months longer when this appears to be necessary. Prompt payment of both interest and principal on the appointed day must be insisted upon.

The question remains: What is likely to be the rate of interest on these loans? Obviously no definitive

¹ H. Hammond, "*Handbook of South Carolina*," 157.

answer can be given until the experiment is made. From the experience of European associations we learn that this is a matter which depends on many circumstances which affect the individual banks in a different manner. As the rates of interest on ordinary loans are higher in America than in Europe, we must expect to find the rates charged by associations in this country higher than those collected by the coöperative banks across the Atlantic. It is also probable, indeed certain, that the rates will be higher than those charged on ordinary loans. When it is remembered that the associations must borrow the greater part of their funds, must allow for salaries and fees to the officers, must provide for the payment of the other running expenses, and must allow for fair dividends on the stock held, and must carry a part of the earnings to the building up of the reserve, it will be seen that the interest charges will necessarily be high, perhaps twelve or fifteen per cent. But twelve, fifteen or even twenty per cent. will seem wonders to the people who for years have been paying merchants from forty to one hundred per cent. As the associations prosper and the confidence of money lenders becomes strengthened in them, the banks will be able to borrow on more reasonable terms than they can at the outset. Their own funds will also be accumulating, and will enable them to dispense more and more with outside capital. The rate of interest on advances can then be reduced. And it must also be remembered that in all cases the nominal interest will be higher than the real interest, for as only members may borrow, those who have received advances will find part of their interest payments returned to them in the form of dividends.

Such are the main features of the plan which is here hesitatingly suggested as a means of solving the prob-

lem of agricultural credit in the southern states, and which it is believed would aid materially in obviating the present difficulties of reducing the cotton acreage. The plan is not proposed as a panacea for all the evils which have accompanied or caused the agricultural depression in the cotton states. Many of these evils it lies in the power of the southern farmer to remedy, and they can be cured by him only. Legislation, either by the state or federal government, can do little to assist him, and the sooner the agricultural classes understand this, the sooner will they themselves set about the task of agricultural reform. No move in this direction is more urgent than an attempt to relieve themselves from their dependence on the advancing merchants for the necessities of life, whether the attempt be made in the manner here suggested, or by some other means.

Perhaps there may be well grounded objections to the plan of introducing coöperative credit into this country, or perhaps there are special circumstances which would render the plan impracticable for the southern states. But until these objections, or these unfavorable conditions are pointed out, it will not suffice to call a plan which has accomplished so much in the way of furnishing credit to agricultural borrowers in Germany, Italy, Switzerland, Austria, Hungary, Belgium, Russia, Ireland and even China,¹ impracticable, when applied to the native born white population of the American cotton states.

Coöperative credit, if introduced, would no doubt be of slow growth, and would not bring immediate or speedy relief to the majority of the cotton producers. But dis-

¹ By the law of 5 November, 1894, provision has been made for the establishment of coöperative credit associations in France. *Annuaire de Législation Française*, 1894, pp. 80-97.

eases which have been slowly fastening their hold upon either the physical or social organism are not easily shaken off, and the evils wrought by the crop lien system are of long standing.

One more word seems necessary before leaving this part of the discussion. While the coöperative credit associations are in no sense charitable or benevolent schemes, and while their foundation and management rest on purely business principles, their introduction into a new country has always, I think, been due to some philanthropic individual, who made himself personally responsible for the success of the first experiment. Doubtless, if coöperative credit is ever established in this country, it will owe its origin to some similar agency. This philanthropist need not necessarily be a wealthy man. Nearly all of the European societies have had very humble beginnings. What is necessary, however, is to have some man take the initiative who sees clearly the benefits to be derived from such an association in his neighborhood, and who is willing to devote a part of his time and energy to the project, and to advance at least a part of the funds necessary to give the plan a fair trial. The success of one such experiment being clearly established, the multiplication and development of other associations will follow as a natural consequence.

The length of this chapter precludes the discussion of other agricultural reforms which seem necessary to put southern agriculture on a firm footing. But before concluding the chapter a few words must be devoted to the share or "cropping" system which, next to the crop lien system, is probably the most important of the causes contributing to the present low state of southern farming.

Though not confined to the negroes, it is perhaps not incorrect to say that the share system is the mode of

cultivating the land most usually practiced in those portions of the cotton belt where negro labor is chiefly employed. A reform in this direction may therefore be expected to accomplish much towards bettering the condition of the negroes and rendering their labor more efficient. Like the existing credit system, the "cropping" system is a heritage coming down to us from reconstruction days. It was devised by the planters in the days when politicians and fanatics were drawing the attention of the freedmen from their work in the cotton fields, and the employers found some means necessary to make the laborers feel the effects of their own idleness. Like the credit system, this cropping system was justified at the time by the exigencies of the situation and because it accomplished its purpose; but it is also like the credit system in that it has long outlived the period of its usefulness and now stands directly in the way of agricultural progress in the planting states. Wherever since reconstruction days there has been a return to the system of hiring laborers for wages, reports show that it succeeds better than the share system. The farming is done better, there is less waste and exhaustion, land has a higher selling value, and the condition of the laborers has improved. The negro requires supervision in order that his work may be efficient, and it is the absence of this supervision which generally accompanies tenant farming that renders the system so wasteful. There should, therefore, be a return to the wage system wherever possible, especially in those localities where negro labor is employed. Even on those plantations where the owner is absent a greater part of the year, experience in the "delta region" has shown that hired laborers under the supervision of a competent

manager are much more efficient and economical than the negro croppers who are left free to conduct their own farming. Under the share system the tenant often promises a larger rent in cotton than he would pay in cash, and this causes the landlord to favor this system of working his land. The tenant system thus stimulates over-production of cotton, and establishes a rental value of land which is purely artificial. But the tenant system is in many localities so inextricably bound up with the system of crop liens that any reform in the former is well nigh impossible until relief is furnished from the latter evil. We are thus forced to the conclusion arrived at by Grady sixteen years ago, "*The remedy for this deplorable situation is first of all the establishment of a proper system of credit.*"

BOOK II.

THE COTTON TRADE OF THE UNITED
STATES.



UNIVERSITY OF MICHIGAN

CHAPTER VIII.

THE HISTORY OF THE COTTON TRADE FROM ITS BEGINNING TO THE CLOSE OF THE SECOND WAR WITH ENGLAND.

It is still a disputed question whether any cotton produced within the present limits of the United States, was imported by Europe previous to the separation of this country from the motherland. The opening chapter of the preceding Book has shown us that cotton was grown only in very small quantities in the English colonies of America, and while it scarcely seems possible that some of this should not have found its way across the Atlantic, this assertion has confidently been made by many writers.

It is true there are records of cotton having been shipped from various colonial ports to England in 1747¹, 1753, 1757², 1764 and again in 1770³, and there is in the possession of a New York cotton broker⁴ a bill of lading for eighteen bales of cotton shipped July 20, 1751, "in and upon the good Snow called the Mary, whereof is master under God, for this present voyage, Barnaby Badgers," sailing from New York to London; but the writers referred to above contend that these shipments were of cotton grown in the West Indies,

¹ Harry Hammond, "Cotton Production in South Carolina," 14; Tenth Census of the United States, Vol. VI.

² Ellison, "A Centennial Sketch of the Cotton Trade of the United States," (separate edition), p. 4.

³ Woodbury's Report on the Cotton Production, Trade and Consumption of the United States, Executive Documents, 24th Congress, 1st session, No. 146, p. 33.

⁴ Mr. Henry Hentz. A photograph of this bill of lading is given in Chew's "History of the Kingdom of Cotton and Cotton Statistics of the World."

shipped into the United States and then re-shipped to Europe. There has never been, so far as I have been able to ascertain, any evidence furnished by these writers to show that cotton of domestic growth could not have been shipped to England before the Revolution, but their denial seems to rest, like the opinion later given by British custom house officials, on the supposition that so much cotton could not have been grown in the colonies. Smither's "History of Liverpool"¹ seems to have been the original authority for this statement. Woodbury's Report on Cotton in 1836,² accepts Smither's statement, and most American and European writers on this subject seem to have followed one or the other of these authorities without further investigation. Professor McMaster goes so far as to state positively of these pre-revolutionary shipments, that "not one pound grew upon our soil, every fibre came from the Spanish Main."³ Considering the fact that in all the southern colonies small quantities of cotton had been raised, and that the production had been of sufficient importance to warrant the introduction of tools for ginning and cleaning it, it would seem that, in the absence of proofs to the contrary, domestic cotton must have gone to Europe even before Revolutionary times. Mr. Dana, the editor of the *Commercial and Financial Chronicle*, says that in 1739 "Samuel Auspourgouer, a Swiss living in Georgia, took over to London at the time of the controversy about the introduction of slaves, a sample of cotton raised by him in Georgia."⁴ As Mr. Dana remarks, we

¹ Pages 124, 153 and 156.

² Page 33.

³ "History of the People of the United States," II: 163.

⁴ Dana, "Cotton From Seed to Loom," 24. Cf. "Georgia Historical Collections," II: 196; Handy, "History and General Statistics of Cotton," in "The Cotton Plant," (Bulletin No. 33, Office of Experiment Stations, U. S. Dept. of Agriculture,) p. 33.

may call this, "in the absence of a better starting point, the first export." Jefferson, in his "Notes on the State of Virginia,"¹ mentions cotton as being an article of export from Virginia previous to the Revolution. The question is only of historic interest. It is certain, in any case, that the export of cotton from the British North American colonies had attained no great commercial importance by the beginning of the Revolution.

The beginning of a regular cotton trade between the United States and Great Britain dates from 1784, when eight bags of cotton carried by an American ship to Liverpool, were seized by the customs officers on the plea that so much cotton could not have been raised in the United States.² It was supposed by the officers that the cotton was of West Indian growth, and as such could not, according to existing treaties, be imported into England on an American vessel. The cotton was released when it was found to have been grown in the United States, but it does not appear to have been a very desirable quality, for it lay for several months in the warehouse of the consignee, Messrs. William Rathbone & Son, before it found a purchaser.³ It was finally sold to Messrs. Strutt & Co., of Derby, in whose mill Samuel Slater, the "father of cotton manufacturing in the United States," was then employed.⁴

That the American cotton was not of desirable quality seems further evident from the fact already mentioned, that two South Carolinians who shipped seed cotton to Great Britain in 1787 were informed that it was not worth producing, owing to the difficulty of separating it from

¹ First Edition, 277.

² Bishop, "History of American Manufactures," (1866), I: 354.

³ Ellison, "The Cotton Trade of Great Britain," 81-2.

⁴ Ellison, "A Centennial Sketch etc.," 5.

the seed. Despite these discouragements, American cotton continued to be shipped to the British markets. Fourteen bags were sent over in 1785 and six bags in 1786, and in 1787 one hundred and nine bags, estimated at 150 pounds each, were received at Liverpool.¹

The culture of the sea island cotton had by this time become well established, and it was this variety of cotton that formed the bulk of the exports until 1793. In 1788, 58,350 pounds were exported, and if we can believe Donnell's statement, American cotton must have grown in favor with the British manufacturers, for he quotes upland cotton as selling on the Liverpool market for 2s. 2d. per pound.² It is probable that this was the price of the sea island cotton, for West Indian cotton was this year selling in Liverpool at 14d. to 20d., and even Fair Pernambuco sold at 18d. to 21d. per pound.³ In 1789, 126,300 pounds of American cotton were sent to Liverpool, and in the next year the shipments amounted to 12,150 pounds. The poor quality of the cotton was probably responsible for the falling off in amount exported, as only 10d. per pound was paid for upland cotton this year, while the price of West India cotton in Liverpool ranged from 12d. to 21d. per pound.⁴

Meanwhile, Great Britain was not the only market open to the American cotton grower, though Lancashire fixed the prices for all grades of cotton. The domestic manufacturers of the United States had long consumed the greater portion of the cotton grown on our soil, and even considerable quantities from abroad. Thus, Wood-

¹ Bishop, I : 354.

² Donnell, "History of Cotton," 45.

³ Ellison, "The Cotton Trade of Great Britain," 83.

⁴ Burns, "Statistics of the Cotton Trade," (1847), Chart 14.

bury's Report of 1836,¹ as well as the reports of earlier investigators, estimates that five million pounds of cotton were consumed in the United States in 1790, although the entire cotton crop of the United States for that year is estimated at only one and a half million pounds. Large shipments of cotton were still received in the United States from the West Indies and Brazil. In 1791, 189,500 pounds of American cotton went out of the country, but the following year showed a shrinkage, only 138,328 pounds being shipped, although the crop for this year is estimated at three million pounds. In 1793, the American crop is estimated to have been five million pounds; the exports were 487,600 pounds. It was during this year that Whitney's cotton gin was invented, and the one great obstacle to the rivalry of America with the West Indies, India, Brazil and the Levant as a cotton producing country, was removed.

Although American "uplands" had been slowly growing in favor with the British manufacturers, the dirty condition of this cotton had prevented it from entering into serious competition with the cotton received from other countries. But, although for the first few years after the invention of the saw gin the British manufacturers complained that the saws cut the wool, this difficulty was soon removed, and the preference was given to the cotton cleaned by the new method.²

So far as the cotton industry was concerned, Whitney's invention was only the completion of the discoveries which created the famous Industrial Revolution. The spinning jenny, the power loom and the mule would have been of little benefit in the cotton industry had it

¹ Page 40; reference to other authorities on page 42.

² Ellison, "A Centennial Sketch etc.," 16.

not been for cheap cotton, "and cheap cotton would have been impossible but for the saw-gin."¹

The sea island cotton which began to be cultivated in the United States in 1786 soon gained the first place among cotton wools. The English inventions in spinning and weaving machines and the application of steam power to the cotton manufacture, resulting in the establishment of the factory system, so strengthened the demand for raw cotton that in spite of the rapid expansion of cotton cultivation, prices remained practically the same for a decade following the invention of the saw-gin. In America, too, factories and cotton mills were beginning to spring up, and thus the home market for cotton grew at the same time that the demand from abroad increased. The result, as we have seen in an earlier chapter, was to turn the attention of the southern farmer almost exclusively to the cultivation of the cotton plant, and every acre of ground capable of producing the new staple was devoted to its production.

Until 1805 the American custom house books, from which we get the statistics of exports, do not distinguish between the cotton produced in the United States and that sent in from other countries for re-shipment. Great Britain was then, as in the absence of commercial restrictions she has always been, the principal market for American cotton. Until the beginning of this century we have no information as to the destination of our cotton, but it is known that nearly all of the earlier exports went to Great Britain.²

Previous to the last twenty years of the eighteenth century, the cotton wool imported into England for use by the cottage manufacturers, came almost entirely from

¹ Ellison, "A Centennial Sketch, etc."

² See Table, Appendix I.

the Mediterranean ports, especially from Smyrna.¹ The insignificance of the imports, the uncertainty of the market and the poor means of transportation, made the sale of the cotton wool very doubtful and its price fluctuating. About 1780 the West Indies, which had for some time been shipping small quantities of cotton to England, became the principal source of supply for the cotton manufacturers who were beginning to use the new spinning and weaving machines. Brazil began exporting cotton in 1781, and its cotton, at first unfavorably received, soon became the most valuable on the market,² and so remained until the sea island cotton, grown in the United States, began to find its way across the Atlantic. Between 1771 and 1775, West Indian sold at 9½*d.* to 14*d.*, and from 1776 to 1780, it brought 16*d.* to 25*d.* The wars with France, Spain and the American colonies had seriously interrupted English commerce, and prices rose rapidly. Speculative operations aided in this, and in 1781 West Indian cotton went as high as 36*d.* to 48*d.*, while Smyrna sold at 34*d.* on the spot and 32*d.* "to arrive."³ This seems to have been the first sale of "futures" on the cotton market.

An increase in the importations and a decline of prices followed during the next three years, but in 1785 Arkwright's patents were thrown open to the public, and the stimulus given to English manufacturers was so great that in spite of the fact that the imports were during this and the following year the largest ever known, being 46,000 bales of 400 pounds each in 1785, and 48,600 bales in 1786, prices continued to advance until by the end of 1786, West Indian sold at 27*d.* to

¹ Ellison, "The Cotton Trade," 81.

² Baines, "The Cotton Manufacture of Great Britain," 305.

³ Ellison, "The Cotton Trade," 83.

42*d.* per pound, Marnaham at 42*d.* to 48*d.*, Pernambuco at 36*d.* to 39*d.*, and very fine Bourbon at 7*s.* 6*d.* to 10*s.* per pound.¹ The West Indies and Brazil furnished nearly all of this cotton, only about one-quarter of the entire amount coming from Turkey and Asia Minor.² The high prices of cotton wool had two effects. One of these was to increase the growth of cotton in the countries already importing; the other was to check the consumption of the new factories. English spinners became alarmed lest the lack of supplies of raw cotton would check the development of the cotton industry at home, which had grown at a rapid rate during the last few years. In 1787 it was estimated that there were then in operation in Great Britain,³ 145 cotton mills containing 1,951,000 spindles, and employing in all stages of manufacturing 350,000 persons. The amount of cotton wool consumed is said to have been 22,000,000 pounds, as against 6,000,000 pounds only six years before.⁴ The result of this increased consumption of cotton by the British manufacturers was to glut the market for cotton goods. It so happened that the East India Company had, about the same time that this sudden increase in manufacturing took place, a large stock of cotton goods in their warehouses, and these they threw upon the market.⁵ But although this overstocking of the markets caused a temporary loss to the British manufacturers, it eventually proved of great advantage to the development of the cotton industry. Heretofore

¹ Ellison, "The Cotton Trade."

² Baines, 304.

³ This estimate was made by the writer of a pamphlet which appeared about this time. Uré ("Cotton Manufacture," I : 290), says: "If we take one-half the above numbers, we shall be tolerably near the truth."

⁴ Donnell, "History of Cotton," 35, 43.

⁵ Uré, "The Cotton Manufacture of Great Britain," I : 287.

the printed calicoes and soft muslins had been worn by the wealthier classes only, but now the cheaper prices of all cotton goods enabled the poorer classes to purchase the fashionable fabrics. "Women of all ranks, from the highest to the lowest began to be clothed in the British cotton manufactures, from the muslin cap upon the crown of their head to the stocking under the sole of their feet."¹

The question, whence should come the supply of raw cotton to meet this increased demand for cotton goods, the English manufactures sought to answer by turning to India, the ancient seat of the cotton industry. The supplies of American cotton were too meagre to cause any hope for relief from that quarter, and the character of the cotton which had been received from there had not been such as to give any encouragement for the future. Hence the Manchester spinners besought the East India Company to bring raw cotton from the territories under their jurisdiction. The company, therefore, experimented with raw cotton, and in 1790 imported 422,207 pounds.² But the Indian cotton proved as unsatisfactory as the American, and a letter of the Hon. Court, dated May 20, 1792, said: "It is evident, therefore, notwithstanding the flattering allurements held out by the British manufacturers, that the article will by no means answer."³ Only 3,351 pounds were imported in 1791, and nothing at all the year following.⁴

American cotton came on the British market in 1784, and by 1793 the importations from this country amounted to nearly half a million pounds. The demand

¹ Uré, I, 288.

² Ellison, "The Cotton Trade," 83.

³ *Ibid.*, 84.

⁴ *Ibid.*

for cotton continued to increase the importations, and the use of the saw-gin in the United States caused the increase to come principally from this country. Fifty-six million pounds of cotton entered Great Britain in 1800, and twenty-eight per cent. of this came from the United States. Prices had also rapidly advanced during the closing years of the century, and Manchester had again besought the East India Company to increase shipments of cotton from the East. In response to this appeal, the shipments of East India cotton for 1799 and 1800 averaged six and two-thirds million pounds, but they met with such poor sales that the East India Company asked the governor of Bombay in 1800 to make "exertions for providing tonnage for our returning shipping without the aid of this article."¹ The West Indies still continued to be the principal source of cotton supplies for the English manufacturers.

Meanwhile the home market for American cotton goods was meeting with rapid expansion. The estimated growth of cotton in the United States had increased from one and a half millions in 1790 to thirty-five millions ten years later. The amount consumed by the household manufacturers in 1790, estimated at five million pounds, was, with the aid of the newly established factories, increased to eight million pounds in 1800.² In spite of the increase in cotton grown at home, the price for "uplands" advanced from 14½ cents in 1790, to 44 cents in 1799, although it fell to 28 cents the next year.

The first factory for manufacturing cotton goods had been erected in 1787 at Beverly, Mass. Two years later Samuel Slater landed on these shores, bringing with him

¹ Ellison, "The Cotton Trade," 84.

² Woodbury's Report, 40.

the secrets of the Arkwright and Hargreaves inventions, and the next year a factory equipped with the new machinery, including seventy-two spindles, was started at Providence, Rhode Island. Fifteen years later a total of 4,500 spindles were in operation in the United States,¹ and at least one-third of a million of pounds of raw cotton were being consumed by the cotton mills, exclusive of that required by the household manufacturers.²

In England, since 1797, American cotton had been steadily growing in favor. In 1802 the imports of cotton wool from the United States exceeded those from the West Indies.³ From 1806 to 1810, United States imports of cotton wool into Great Britain averaged more than three times the amount sent from either the West Indies or Brazil, and exceeded the total amount received by Great Britain from all quarters except the United States.

In 1801 American cotton, which, with the exception of small amounts⁴, had been sent to England, began to find an important market in France. The amount sent by the United States direct to this country in 1801 was 844,728 pounds, and by 1806 the amount had increased to 7,082,118 pounds.

The growth of the cotton trade of the United States during the first two decades of the nineteenth century was in the face of difficulties which seriously threatened the commerce of the new republic. The Napoleonic wars, the attempts of Great Britain and France to cripple the commerce of the United States; the Non-Importation Act and the Embargo at home; and, finally,

¹ Woodbury's Report, 51.

² *Ibid.*, 40, 42.

³ Ellison, "The Cotton Trade," 85.

⁴ For details see Pitkin's "Statistical View of the United States,"

the War of 1812-15 with Great Britain, all combined to injure not only our shipping interests but to impair the prosperity of the farming community as well. Although the burden was more severely felt by those farmers who produced perishable commodities, it fell with great weight upon the shippers and producers of cotton. The exports of this staple which in 1807 had exceeded sixty-six million pounds fell in 1808, the year of the embargo to barely twelve million pounds. Of this nearly eight million pounds reached Great Britain, and two million pounds found a market in France. After the removal of the Embargo, when the pent up cotton of the United States found an outlet, the exports of this article went up to ninety-three million pounds in 1810, but under war conditions sank to less than eighteen millions in 1814.¹

The growth of cotton had slowly increased after the removal of the embargo, but the war checked this increase, and during the war period the crop is estimated to have been only about seventy-five million pounds annually. Although the American demand for raw cotton was growing with prodigious rapidity, it was not strong enough to prevent a decline in prices. Thus, American prices for "uplands," which the year before the embargo had averaged 21½ cents a pound, were by 1812 only 10½ cents, and not until 1816 did they attain their former high average.²

In Great Britain, where there was, of course, a scarcity of cotton, prices naturally rose, reaching in 1814 their highest point, when 29½ pence was the average price.

The cotton trade with the United States during these years almost ceased; less than 38,000 bales being re-

¹ See Table, Appendix I.

² *Ibid.*

ceived in 1814 from this country. Nor did the imports from other countries make good the loss of the American cotton, Brazil being the only country which made any noticeable increase in her shipments of cotton during the war.

But if the period of restriction proved unfavorable to the cultivators of cotton, it gave the opportunity for a wonderful development of cotton manufacturing in America and for the expansion of a home market for raw cotton. The year 1807, when the embargo was laid, saw fifteen cotton mills in operation in America, with a capacity for producing 300,000 pounds of yarn per day.¹ The number of spindles in operation was estimated by Mr. Zachariah Allen to have been 4,000.² In 1810, according to Woodbury's report,³ there were then in operation in the United States 87,000 spindles, working up three and a half million pounds of cotton, while including that used by the household manufacturers, sixteen million pounds of cotton were consumed. The rapid growth of this industry continued through the war period when the cessation of imports of cotton goods from Great Britain, the total value of which in 1807 had been eleven millions of dollars,⁴ threw a valuable market into the hands of the American manufacturers. Towards the end of the war, power looms were placed in operation in the American mills which had hitherto been engaged only in spinning yarn, and from now on, "the entire process of converting cotton into cloth took place under

¹ Donnell, *Op. Cit.*, 62.

² *Ibid.*, 63. Woodbury's Report, page 51, estimates the number at 8,000, but this seems too large.

³ Pp. 40, 51. Baines gives the number of mills in the United States for this year as 102, consuming 10,000 bales of cotton. *Op. Cit.*, 510.

⁴ Taussig, "Tariff History of the United States," 27.

one roof."¹ In 1815 there were in the neighborhood of 165 mills in the New England states, operating 119,310 spindles.² The whole number of spindles in the United States was estimated at 130,000, and the amount of cotton consumed at thirty-one and one-half million pounds.³

The long period of commercial difficulties and hostilities had retarded somewhat the expansion of cotton culture, and had given our merchant shipping a blow from which it has never recovered, but it had given to New England in place of her shipping interests a well established manufacturing industry, and to the southern cotton grower a new market for his produce, henceforth one of the most important in the world.

¹ Taussig, "Tariff History of the United States," 29.

² Donnell, *Op. Cit.*, 68.

³ Woodbury's Report, 40, 51.

CHAPTER IX.

THE HISTORY OF THE COTTON TRADE FROM 1815 TO THE CLOSE OF THE CIVIL WAR.

In studying the condition of the English market for American cotton in the early part of this century, some notice must be taken of English tariffs on cotton-wool. The tariffs imposed during the eighteenth century were for the purpose of impeding the cotton manufacture in England, and were imposed at the request of the woolen and linen manufacturers.¹ But these tariffs were removed, and raw cotton admitted free of duty when the growing cotton industry had become strong enough to resist attack. The war with France in which England became involved during the closing years of the century made the demand for extra revenue so imperative, however, that in 1798, among other things raw cotton was made subject to an import duty. The United States, however, did not suffer from discriminations, as her cotton, along with that from Turkey, was admitted on paying 6s. 6d. per 100 pounds, while that from other countries was made subject to higher rates.² In 1801, all cotton was again admitted free, but the tariff was renewed the next year with a duty of 7s. 10d. per hundred weight on American and Turkish cotton, and somewhat higher rates on cotton from other countries. The next year the renewal of the war with Napoleon necessitated the raising of this duty, cotton from the United States, the East Indies, Turkey and the British colonies paying 16s. 8d. per hundred weight, while other countries paid

¹ Fawcett, "Free Trade and Protection," 33.

² Baines, 326.

25s. The duty was raised $3\frac{1}{2}d.$ in 1805, and in 1809 all cotton-wool was charged 16s. 11d., per hundred weight. The end of the Napoleonic wars saw the duty reduced almost one-half, all sorts of cotton now paying only 8s. 7d. per hundred weight.¹ In 1819 began a series of discriminating duties against cotton not grown in the British possessions. Foreign cottons were subjected to a duty of 8s. 7d. per hundred weight, while cotton from the British possessions paid only 6s. 3d. per hundred weight.² From 1820 to 1831 American cotton was subject to a duty of six per cent. *ad valorem*, and in the latter year this duty was raised to 5s. 10d. per hundred weight, in order to make up the deficiency in the revenue caused by the repeal of the duty on cotton prints. This high duty checked the importation of the cheaper grades of cotton to such an extent that the prices of the coarser goods rose, and the duty was reduced to 2s. 11d. in 1833.³ Cotton from the British possessions had in the meantime been paying since 1821, either no duty at all or only 4d. per hundred weight.⁴

In 1840 Great Britain was at war with China. The United States sought to turn to her own advantage the loss of this valuable market for British cotton goods, and heavy shipments of cotton goods were made by our own country to China during the years 1841-3.⁵ Even after the war was ended in 1842, it seemed for a time that American manufacturers, supported by the tariff of 1842, might continue to compete successfully with British manufacturers in the Chinese trade.⁶ Under these circumstances, English manufacturers began to clamor for

¹ Baines, 327.

² *Ibid.*

³ Ashworth, "Cobden and the League," 12.

⁴ Baines, 327.

⁵ *New Orleans Price Current*, quoted by Donnell, 292.

⁶ Donnell, 299.

relief from the tariff imposed by their government on raw cotton. Their demands came at a very opportune time, for the great free trade movement led by Cobden and Bright was in the ascendancy, and the Peel ministry was favorable to the movement. In 1845 (8 and 9 Vict. C. 90), along with the duty on numerous other articles, went that on cotton-wool, which henceforth was admitted free to British markets from all quarters of the globe.

The manufacture of cotton goods in America, which had received so great a stimulus from the war with Great Britain, began to suffer a reversal of prosperity on the return of peace. A commercial depression settled upon the country during the years 1818-19, and fell with particular severity upon the newly established manufactures. The re-opening of commerce between England and the United States at the end of the war, opened again the English market to American cotton, but also the American market to English cotton goods. The prices of American cotton rose in the United States and fell in England, and the reduction in the prices of cotton goods in the United States consequent upon the heavy importations from England, proved very destructive to American manufacturing operations. Many of the cotton factories were obliged to close altogether for a time.¹ Just as in 1787, when threatened by cheaper goods from India, the English manufacturers had petitioned Parliament for help, so now the American manufacturers sought aid from Congress and secured the first important tariff that had been levied. The commercial classes of New England and New York opposed it, but the South supported it on the ground of its providing a market for American cotton.²

¹ Taussig, "Tariff History of the United States," 29.

² Donnell, 70.

Meanwhile, during the war a discovery had been made that raised up a competitor to the southern states for the British cotton market. We have noted the failure of the cotton from the East Indies to meet the requirements of the English spinners. This was on account of the shortness of the staple, which rendered it unsuitable for the spinning machines. But about 1815 it was discovered that by mixing it with the long staple wools of other countries it could be used to advantage.¹ Imports of Indian cotton increased, until in 1818 the number of bales received from this quarter exceeded that received from the United States. Prices of the Indian cotton were also from three to five pence less than prices for American cotton. After 1818, importations of Indian cotton fell off, and by 1820 were only one-sixth the amount received from America.

After the depression of business which began to be felt all over the commercial world about 1818-19, the cotton industry and cotton trade revived. In the American market, with but few exceptions, cotton prices continued to fall for a decade following 1820. The New England manufacturers had readjusted their business to the lowered prices of cotton goods, and the minimum duties established by the tariff of 1816 had seriously impaired the foreign competition.² The establishment of factories continued to increase. The little village of East Chelmsford, in Massachusetts, became a factory town in 1822, and its name was changed to Lowell. By 1830 there were in operation in this city 129,828 spindles, a number almost equivalent to the total number of spindles in the United States fifteen years previous.³

¹ Donnell, 68.

² Taussig, 29, Note 2.

³ Woodbury's Report, 51, 56.

The total number of spindles in the United States now approximated one and a third millions, or about a sixth as many as then existed in Great Britain.¹ The amount of cotton consumed in the United States had increased from twenty-seven million pounds in 1815 to seventy-seven million five hundred thousand pounds in 1831.² The rapid decline in prices which had taken place between 1815 and 1830, was largely the result of the opening up new cotton lands in the states formed from the Louisiana purchase. In 1811 fifteen-sixteenths of the cotton crop was raised in the Atlantic coast states, Virginia, North Carolina, South Carolina and Georgia, and in 1821 these states still produced over two-thirds of the total crop. Five years later, however, the western states, Alabama, Louisiana, Mississippi and Tennessee, almost equaled the Atlantic coast states in cotton production, having raised over three-sevenths of the entire crop grown that year, and by 1833 the western states were in the lead, producing six-elevenths of the entire crop.³

The rate of increase in the cotton crop had been quite moderate until 1825.⁴ Within the next five years, however, it nearly doubled, owing to the increase from the new states, and prices fell to ten cents a pound by 1830. The following decade was one full of prosperity for the cotton industry, both at home and abroad. Encouraged by the low prices of cotton during the twenties, and by favorable tariff legislation, the American cotton manufacture doubled its consumption during the decade. The English market had also undergone a rapid expansion, and the falling off of imports of cotton from the

¹ Woodbury's Report, 51. Baines, 511.

² Baines, 510.

³ Woodbury's Report, 13.

⁴ See Table, Appendix I.

West Indies and Brazil had left the South almost a monopoly of the British market. Under these circumstances, in spite of the increase in cotton production in this country, especially in the new states, "consumption shot ahead of supply," and by the end of 1835, with but a few weeks' supply of American cotton in British ports, prices had advanced to 10¼ *d.* per pound.¹

As was usual under such circumstances, British spinners began to complain of their dependence upon one source of supply for their raw material, and to criticize the East India Company for not promoting the cultivation of cotton in India,² although, so long as cotton prices were low, the East Indian cotton was regarded with disdain and but little use was made of it in manufacture. The high prices of cotton had their usual effect, however, during the next ten years. The production of the staple was everywhere increased, and the warehouses of the Liverpool importers rapidly filled. In 1843 the stocks of American cotton in Liverpool equaled forty-three weeks' consumption; in 1844, thirty-six weeks', and in 1845, thirty-eight weeks' consumption. From the East Indies, from Egypt, which since 1823 had been a cotton growing country of importance, from Brazil and from Turkey, cotton continued to pour into the British ports, the amount received from all quarters in 1845 being nearly double that imported in 1835. Prices declined, until in 1845 the average price of middling uplands in New York was only 5.63 cents, and in Liverpool 4 *d.* Never before nor since have American prices for cotton been so low as during the summer of 1845.

It was now time for the planters to complain, and the opportunity was not neglected. Speculative operations,

¹ Ellison, "The Cotton Trade," 90.

² *Ibid.*, 89-90.

it was said, had been at work to depress the price of the great southern staple. Some ground for this claim was furnished by the fact that speculation had been especially active during the years following 1837. The fluctuations in the crops grown, a good year being followed almost invariably by a poor one, and the lack of a well developed system of reporting, such as exists to-day, put the estimates of speculators at entire variance with the actual facts of production and consumption.¹ Professor M'Cay of the University of Georgia, seems, in 1842, to have appreciated the fact that production was out-running consumption, and he gave the warning to planters and speculators that "there is nothing in the history of the cotton trade; nothing in the present state of the demand and supply; nothing in the present and future state of the stocks on hand, to justify an advance over the prices of 1842; and all attempts of speculators to force prices can only recoil on themselves."² The importance of M'Cay's argument, which he supported with statistics, does not seem to have been appreciated by the planters, for the crops for the three following years were the largest ever grown up to that time. Over-production, instead of deterring the planters from planting largely the following year, caused them to endeavor "by increased cultivation to compensate themselves for low prices."³ The depression in the business of raising cotton, however, in Louisiana at least, caused many planters to abandon it and to extend the cultivation of the sugar cane in that state.⁴

As might have been expected, the manufacturers of

¹ Donnell, 267, 281, 292, 304, 315.

² *Hunt's Merchants' Magazine*, IX., 523.

³ *Ibid.*, XIV., 148.

⁴ *Ibid.*, 149.

cotton, both in Europe and America, profited richly by the low prices of the staple between 1840 and 1845. When, however, the American crop of 1846-7 showed a great falling off, and prices rose rapidly, the complaints of the English spinners against the East India Company were renewed, and a Parliamentary committee was appointed to investigate the causes retarding the growth of cotton in India. The committee reported that the various evils which they found retarding the growth of cotton in the East, could be remedied with "the assistance of British capital and enterprise," but that even this would not avail "unless the manufacturers would guarantee to purchase the produce raised."¹ The prices of American cotton declined again after a year or two and the complaints ceased.

From 1850 to 1860, average annual prices of American cotton remained, comparatively speaking, steady, as a comparison with the table of statistics² will show. Some of the years showed within themselves considerable fluctuations, owing to the fact that estimates of speculators and spinners failed to conform to the actual conditions of the crops when they were harvested. The present system of dealing in "futures," which enables importers to protect themselves from a loss due to falling prices, was wanting, owing to the lack of the modern methods of communication. On the whole, however, the decade was one very favorable to both planters and spinners. Production increased at a more regular pace than in any previous decade, and the consumption of American and European mills also maintained a pretty uniform rate of increase. Prices which at 9½ cents average for the year, were lowest in 1851-2, and, at 13½ cents average,

¹ Ellison, "The Cotton Trade," 90.

² Appendix I. Compare with chart.

were highest in 1856-7, were always high enough to allow of a fair profit to the planter, but not so high as to discourage the spinner. Even the slight rise in prices in 1857, caused by a short crop in the United States, produced the usual feeling of alarm among the English spinners, and the "Cotton Supply Association of Great Britain" was established¹ under the lead of the Manchester spinners, who felt "it to be a duty to inquire whether an increased supply of cotton can be obtained from other countries, so as to lessen the dependence of Great Britain on the United States."² The object of the association was to "engage in gathering and distributing information respecting the capacity of various districts, and furnishing the best seed, tools, and other implements, wherever they are likely to be advantageously employed."³ Plans were projected for obtaining government aid in increasing the transportation facilities of India, but these plans were frustrated by the attention of the government being called to a more serious affair,—the outbreak of the Indian Mutiny in 1857.

The establishment of the Cotton Supply Association could not have been more timely. A "cotton famine" had long been the spectre which haunted the homes of the Manchester spinners. Their fears were based not upon their belief in an armed conflict in America, but upon their doubts as to the capacity of the southern states to produce the cotton demanded by the increasing power of consumption of the British mills. In spite of the efforts of the southern planters to convince British manufacturers that their supply of cotton was dependent on slave labor, the Manchester spinners assented to this

¹ Ellison, "The Cotton Trade," 90.

² Donnell, 454.

³ *Ibid.*, 466.

only so far as to acknowledge that while slavery existed in the United States there was no hope of a successful cultivation of cotton there by free labor. Seeing the consumption of their mills growing at a much more rapid rate than the slave population of the South, while the production of cotton during the fifties had but slowly increased, they were filled with alarm.¹ Their efforts put forth to relieve themselves from dependence on slave labor fortunately lessened the effects of the crisis which was actually impending. Through their efforts the production of other countries had already been stimulated by the outbreak of the American Civil War, and the cutting off of supplies of cotton from the United States found some recompense in the increase of imports from India, Egypt and Brazil. Before entering into an account of the cotton trade during these trying years, let us pause in our historical narrative to glance at the position of the cotton industry in Europe and America in 1860.

The great world market for cotton was Great Britain. Here were some 2650 cotton factories containing over thirty million spindles and three hundred and fifty thousand looms run by a three hundred thousand horsepower, and operated by four hundred and forty thousand persons. Ninety per cent. of these workers were adults, and fifty-six per cent. were females. Over ten hundred million pounds of cotton were consumed in the year, producing for exportation twenty-eight hundred million yards of cotton cloth and nearly two hundred million pounds of twist and yarn.² Of the supplies of cotton for this gigantic industry, 77 per cent. came from the

¹ Von Halle, "Baumwollproduktion und Pflanzungswirtschaft in den Nordamerikanischen Südstaaten," Erster Teil, 175.

² Arnold, "The Cotton Famine" (1864), 36-7.

United States, 16 per cent. from the East Indies, and the remainder mainly from Egypt, Brazil and the West Indies. But even these figures do not give one an appreciation of the British cotton industry until he learns its extremely local character. For in Lancashire county, and the borders of its two southern neighbors, Cheshire and Derbyshire, were to be found 2195 of these 2650 factories, and three hundred and sixty thousand of the employes.¹ A vast population in a limited area was thus dependent for its daily bread upon the fortune of the cotton industry.

On the Continent, there was, of course, no such centralization of the cotton industry, and the number of spindles was not one-half so great as in Lancashire alone.² The chief Continental country for cotton manufacturing was France, which consumed in 1858 two hundred and forty million pounds of cotton. With the exception of some small amounts of Egyptian cotton for finer purposes, almost this entire amount came from America.³ The chief seat of the industry was at Lille. Holland and the Netherlands imported annually about one hundred thousand bales, the most of which came from America, although the Dutch East Indies furnished small amounts.⁴ Russia, Germany, Austria, Switzerland, Italy and Spain imported and manufactured con-

¹ Arnold, "The Cotton Famine" (1864), 37.

² Prof. Leone Levi in a paper read before the Statistical Society of London in 1864, gave the following as the number of spindles in Europe:

Great Britain,	30,000,000	Switzerland,	1,300,000
France,	4,000,000	Italy,	500,000
Russia,	2,000,000	Belgium,	500,000
Germany,	2,000,000	Spain,	300,000
Austria,	1,500,000		

³ *Hunt's Merchants' Magazine*, XLV: 11.

⁴ *Ibid.*

siderable cotton, although less than the countries above named.¹

Coming to our own country we find that there were, in 1860, nine hundred and fifteen establishments engaged in the manufacture of cotton goods, running about four million three hundred thousand spindles and employing one hundred and twenty-three thousand employes, three-fifths of whom were females. The total cotton consumption of the United States was over three hundred and sixty-four million pounds. Although not so concentrated as the English manufacture, yet 472 of the mills, and eighty-one thousand of the operatives, were in the New England states alone.² The crop of the southern states was this year the largest that had ever been grown, exceeding two million pounds, and in spite of the fact that the crops and exports of India and Egypt had greatly increased, middling uplands still found a ready sale at 11 cents on the New York market and 6d. in Liverpool. American cotton goods to the value of nearly eleven million dollars were exported from the United States, and the value of the raw cotton sent abroad exceeded that of the exports of any other commodity produced in this country.

Although the probability of secession and armed conflict between the North and South had been appreciated for some time both in Europe and America, the cotton industry on both sides of the Atlantic was unprepared for a long war. In England, it is true, there had been for the past two years a glut of production. The unexampled crops of America for 1859 and 1860, and the increase of imports from other quarters, had proved a sharp spur to cotton manufacturing in Lancashire, and

¹ *Hunt's Merchants' Magazine*, XLV : 11.

² Preliminary Report of the Census of 1860, 180-81.

thousands of yards of cotton goods had been produced for which there was no demand. "The India and China markets had been over-fed with manufactures, until they threatened to burst with bankruptcy. . . . In the preceding year (1859), India had taken manufactures to the value of £17,000,000, one-third of the whole export; but merchants still piled their goods in the warehouses of Bombay, until ruin stared them in the face, and they began to realize the fact that these commodities had become an unmarketable burden. . . . In Bombay 'shirtings' found no buyers; no one cared to inquire after mule-yarns, and water-twist was a drug on the market."¹

The stocks of cotton in England at the end of 1860, which amounted to 594,505 bales, were larger than had ever before been known. To these were added in the early part of 1861 imports from America of 1,650,000 bales of the crop of 1860 which the threats of war had led the planter to make unusual haste in marketing.² The activity of the Cotton Supply Association had caused the shipments from the East Indies for the year 1860 to reach 563,000 bales,³ an amount only once before attained. The stock of cotton goods on hand was so large that the first sign of distress which appeared when in October, 1861, many mills began to run short time, was caused rather by the overstocked condition of the market than by the lack of supplies of raw cotton.⁴ Yet, in spite of this plethora of cotton goods and raw cotton, the Lancashire spinners were ill-prepared to dispense with the American cotton. The total consump-

¹ Arnold, 42-3.

² *Ibid.*, 43.

³ *Hunt's Merchants' Magazine*, XLIV: 354.

⁴ Arnold, 47.

tion of the British mills for 1860 had been 2,632,000 bales, and the imports of cotton were 3,367,000 bales. Of this amount, the southern states had sent 2,582,000 bales.¹ With the cutting off of this source of supply, even if the importations from other quarters could be doubled, which was doubtful, less than a year might be expected to pass before the mills would be stopped from a lack of material.

It is difficult to estimate the stocks of cotton available for the cotton manufacture of America at the beginning of the war. In February, 1861, the stocks in the ports were estimated at 617,000 bales,² but probably not half this amount was available for northern spinners. The contracts which the New England manufacturers were entering into with the government prevented their feeling any alarm as to the demand for the manufactured goods, and the fact that the most of the cotton which came out of the South during the war came over-land as the northern armies gradually made their way southward, gave the American spinners an advantage over their English cousins in the procuring of supplies of cotton for their mills. And yet the first few months of the war showed that the supply of cotton which could be obtained at even war prices would be entirely inadequate to keep the mills running.

The hopes and expectations of the English and American spinners and of the southern planters were that the war would be a short one. The gravity of the situation was not appreciated in England, even after the bombardment of Sumter.³ In America the strength of the opposing forces and the power of endurance of the

¹ *Hunt's Merchants' Magazine*, XLIV : 354.

² *Ibid.*, 328.

³ Arnold, "The Cotton Famine," 41.

South was under-estimated at the North until the war had long been in progress. The South relied on the importance of its chief staple to the manufacturers of the North and Europe to prevent the war being of long duration, perhaps to prevent any conflict whatever. England, it was said, would not allow the southern states to be invaded by the northern armies, even should these get beyond the border states. The moment that the cotton fields of the South were threatened, English fleets would enter Boston and New York harbors, and, with threats of bombardment, force the government at Washington to sue for peace.¹ For years the dependence of Europe and America upon the cotton supply of the South had been preached as a cardinal doctrine by southern economists and statesmen, while newspapers and stump orators had heralded cotton as a king whose power none dared to deny, until nearly every man in Dixie, and some in the North and in England, had come to accept it as an indisputable fact. Not only was the cutting off of supplies expected to bring the northern spinners to their knees, but cotton was intended to form the basis of the financial measures adopted for prosecuting the war.² Had it not been for the reliance which the architects of the Great Rebellion placed on cotton as a means of obtaining revenue, it is doubtful if the war would have been undertaken.

Trusting in the brevity of the war, English and American spinners did not show the alarm which the warlike preparations of the early part of 1861 might have been expected to produce, and the year opened with middling uplands selling at only 12 cents in the New

¹ *De Bow's Review*, January, 1861, p. 95.

² *Commercial and Financial Chronicle*, II: 196.

York market, and 7 1-16 *d.* in Liverpool.¹ There was even a decline in prices during February and March. Sumter was fired on April 12, and the news being received at New York caused great excitement on the cotton market. Prices rose from this time on, although there was little cotton actually bought and sold. Business was chiefly of a speculative character. Prices went even higher than in Liverpool, and in August cotton began to come to America from that port.²

The early part of the year 1861 brought no particular hardship to the cotton industry, either at home or abroad. Although much less cotton had been planted than during the phenomenal year of 1859-60, the harvest was still a respectable one. *The New York Shipping and Commercial List* estimates it to have been 3,650,086 bales. The incomplete state of the blockade had permitted most of the crop to reach Europe, it being estimated that 3,127,568 bales had been exported during the year ending Aug. 31, 1861. The activity of the American spinners had been somewhat slackened, yet the consumption of cotton for the year ending Aug. 31 was 650,357 bales in the North, and 193,383 bales in the South, a total consumption larger than any year except the two immediately preceding had shown.³ The threatened blockade had no doubt caused the southern planters to hurry their crops to market. In England the manufacture of cotton goods continued for the first nine months of 1861 at almost the same rate as during the year 1860, while the rate of importation of raw cotton from America and India had greatly increased.⁴ The

¹ Donnell, 508, 511.

² *Ibid.*, 512.

³ *Hunt's Merchants' Magazine*, XLV: 500.

⁴ Arnold, 45.

completed blockade, followed by a rising market, was welcomed by the manufacturers, who, with their enormous stocks of cotton goods, had begun to run short time in October and were fearing "hard times" for the winter.¹ Hard times came, but not for the holders of cotton goods or the speculators in cotton, who during the next few months reaped fortunes from their investments.

From this time on, difficulties gathered thick and fast for the cotton industry. The statistics of production for the next four years are entirely wanting, and the estimates made at the time were mere guess work and proved by later developments to have been entirely too large.² In August, 1862, the British consul at Charleston estimated that the crop for that year (not then picked) would not exceed 1,500,000 bales,³ and this was probably as good a guess as was made at the production for any one year. The absence of the planters and overseers at the front, the dangers of invasion and the lack of funds caused small crops to be planted, and still smaller ones to be harvested.

Many ideas found circulation at the North at this time in regard to a supply of raw material for the cotton mills. Fibrilla, or cottonized flax, was for a time thought likely to prove a substitute for southern cotton.⁴ Plans were also projected for raising cotton in the mild climate of the middle states. Southern Illinois, it was said, had

¹ Arnold, 47.

² *The Commercial and Financial Chronicle*, (I : 258,) estimated the production as follows :

1861-2,	6,500,000 bales ;
1862-3,	4,800,000 "
1863-4,	3,100,000 "
1864-5,	1,500,000 "

³ *Hunt's Merchants' Magazine*, XLVII : 556.

⁴ *Ibid.*, XLV : 102, 206 ; XLVI : 62, 65-6.

"at least five million acres well adapted to the culture of the plant."¹ Still another fruitless idea was to introduce perennial cotton from Peru into the United States. The projector of this plan, Captain R. C. Kendall, of the United States Geological Survey, predicted that "the period is not very remote when hedges, most efficient as fences, shall yield annual dividends of cotton; ornamental trees, blending the useful with the beautiful, shall repay ten-fold their cost and culture; when the rugged heights of the Hudson, the plains of New Jersey, the fertile valleys of the Keystone state, and the undulating prairies of the great West shall gleam in the sunlight, white as the winter drift, with generous pods of democratic cotton."²

As there are no reliable crop statistics for the war, so are there also no authentic records of exports. Those published by the United States Treasury Department are here given, but they do not, of course, include cotton which ran the blockade:

Fiscal Year. (Ending June 30.)	Sea-Island. Pounds.	Short Staple. Pounds.	Total. Pounds.
1859-60	15,599,000	1,752,087,000	1,767,686,000
1860-61	6,170,000	301,346,000	307,516,000
1861-62	66,000	4,998,000	5,064,000
1862-63	528,000	10,857,000	11,385,000
1863-64	330,000	8,564,000	8,894,000

Of the cotton which safely ran the blockade, the only idea we have is the record of receipts of American cotton at the principal ports of Europe and of the North, these including, of course, legitimate shipments of cotton. So effective was the blockade that not much cotton escaped in this way. Such as did was landed in the

¹ *Hunt's Merchants' Magazine*, XLVI: 272.

² *Ibid.*, 66.

West Indies and re-shipped to Liverpool, Havre, Boston, New York and other ports. The British consul in Charleston estimated in August, 1862, that there then remained in the South 2,500,000 bales of the crops of 1860 and 1861; that 1,000,000 bales had been destroyed, and that only 50,000 bales had succeeded in escaping the blockade.¹ The following table shows the number of bales of cotton from America and other countries received in Great Britain and on the Continent from 1860 to 1865.²

Year.	Imported into Great Britain		Imported into the Continent	
	From United States. Bales.	From Other Countries. Bales.	From United States. Bales.	From Other Countries. Bales.
1860	2,580,700	785,000	971,000	100,000
1861	1,841,600	1,194,000		
1862	72,000	1,445,000	60,000	529,000
1863	132,000	1,932,000	36,000	801,000
1864	198,000	2,587,000	43,000	889,000
1865	462,000	2,755,000	68,000	1,170,000

For reasons already stated the American spinners had an advantage over the Europeans in securing the scanty supplies of American cotton which in one way or another found their way out of the South during the war. The higher prices which prevailed in the United States drew much of the cotton which had reached Liverpool back to the United States. This business of re-shipping across the Atlantic began, as we have already noted, in August, 1861. By the end of that year 12,500 bales of American cotton had been sent to the United States from Liverpool, 2,000 bales from the Continent, and in addition 4,000 bales of Surat cotton had been sent

¹ *Hunt's Merchants' Magazine*, XLVI : 556.

² *Commercial and Financial Chronicle*, II : 196 ; Ellison, "The Cotton Trade," Appendix, table 1.

over.¹ By the middle of January, 1862, 20,000 bales had been drawn from Liverpool to the United States by the high prices.² Grant's successes in western Tennessee in the spring of this year were followed by an outflow of cotton from that quarter and a lowering of prices at home, and 500 bales of this very cotton which had already journeyed twice across the Atlantic, returned to Liverpool in April.³

But the New England mills had begun to feel the want of raw material, or were unwilling to purchase it at the high prices. "After the first four months of the year (1861) some of the mills began to work short time or to stop some portion of their machinery, and for the last half of the year many mills suspended operations entirely for a great portion of the time; and those that continued in operation did not probably work more than four days in the week, so that if we estimate full work for the first four months, and half work for the remaining eight months, making for the year two-thirds work, we shall probably make a full allowance for the year's operations."⁴ The consumption of cotton by the northern mills during the calendar year 1861 was estimated by the *New York Shipping List* and the *New York Herald* at 394,451 bales, as compared with 855,361 bales the previous year.⁵ The year 1862 began with a stock of only 75,000 bales on hand for the northern mills.⁶ In Boston there were only 1,500 bales, as compared with 5,000 the year before.⁷ Very little cotton was received

¹ Batchelder, Report on the Cotton Manufacture, in Boston Board of Trade Reports for 1863, 123.

² *Hunt's Merchants' Magazine*, XLVI : 268.

³ *Ibid.*, 392.

⁴ Batchelder, in Boston Board of Trade Report for 1862, 121.

⁵ *Hunt's Merchants' Magazine*, XLVI : 268.

⁶ *Ibid.*

⁷ Boston Board of Trade Report for 1862, 69.

from any source by the northern mills during the year 1862. Only 43,493 bales came into Boston, as compared with 191,777 bales in 1861, and 381,966 bales in 1860.¹ The northern armies made but little progress in opening up the South this year, and the arrivals overland were slight. The captures of Port Royal, New Orleans and Memphis by the Federal troops were expected to open up a pathway for cotton, but either there was little cotton at these ports, or, as the Boston Board of Trade Report for 1863,² says: "The Confederates have guarded this article with unusual vigilance, burning and destroying all likely to fall into our hands, knowing that the 'Cotton Famine' of Europe was their most active agent in bringing about a recognition of their confederacy." Certain it is that very little cotton found its way out of the South during the war, as is indicated by the statistics of receipts and shipments from the chief port, New Orleans.³

Year.	Receipts. Bales.	Total Exports. Bales.	Export to Liverpool. Bales.	Export to Havre. Bales.	Export to New York. Bales.	Export to Boston. Bales.
1859-60	2,235,448	2,214,296	1,348,163	303,157	62,936	131,648
1860-61	1,849,312	1,915,852	1,074,131	384,938	29,539	94,307
1861-62	38,880	27,678	1,312	472	4,116	109
1862-63	22,078	23,750	2,070	1,849	17,859	1,418
1863-64	131,044	128,130	1,155	4,023	109,149	12,793
1864-65	271,015	192,351	31,326	5,952	144,190	15,993

With such scanty supplies of cotton, it will not be surprising to learn that the activity of the spinners was very slight. Mr. Atkinson supposed one-half the 4,800,000 spindles north of the Potomac to have been idle at

¹ Boston Board of Trade Report for 1863, 49..

² Page 49.

³ *New Orleans Price Current*, quoted by *Hunt's Merchants' Magazine* LI : 321 ; LIII : 255-6.

the beginning of the year 1862, and that less than 25 per cent. were in operation in July. During this month some of the larger mills secured government contracts and resumed operations, so that from August first, on to the end of the year, perhaps 36 per cent. were in operation.¹

The year 1863 was still behind the year 1862 in production, although manufacturers, who had begun to deal in "futures" and to watch the market very closely, suffered less from fluctuations. Mr. Atkinson estimated that about 2,000,000 spindles were in operation by March and that the production of cotton goods was about 40 per cent. that of *ante-bellum* days. Goods began to accumulate, however, and in June only about 1,000,000 spindles, or a little more than 20 per cent. were in operation. An increase to about 1,700,000, or 36 per cent., took place in the autumn, when a brisk demand for cotton goods was created. The scarcity of cotton and of operatives prevented other mills from starting. For the whole year, an average of about one-quarter of a full supply of cotton, or 4,000 bales per week, were consumed.² "The Cotton Famine has passed," said Mr. Atkinson, March 31, 1864, "without ever having been reached, if the expression may be allowed; and under the present trade regulations, a supply of cotton is being received sufficient for the manufacture of all the goods which can be sold while cotton remains so high in price, with a probability of a considerable surplus for export."³ Stocks on hand at the end of the year were larger, and the receipts of cotton at the North had shown an increase over 1862. During the year 1864

¹ Boston Board of Trade Report, 1863, 96-7.

² *Ibid.*, 1864, 111-112.

³ *Ibid.*

the production of the northern mills continued at about the same rate as in 1863, about one-third of the spindles on an average being in operation. Some of the mills changed from the manufacture of cotton to that of wool, so that Mr. Atkinson thinks the number at the end of the year to have been five per cent. less than at the beginning.¹

When on April 5, 1865, Mr. Atkinson had made his report to the Boston Board of Trade, Grant's army had already entered Richmond, and on the 9th Lee surrendered, thus virtually ending the war. The year 1865 was, therefore, one of revival for the cotton trade and manufacture of the United States. The New England manufacturers found less difficulty in obtaining raw material for their mills than they did in securing the labor to operate them. The receipts at Boston were for the year 162,428 bales, an amount nearly as large as that of the year 1861.²

The Cotton Famine had produced no such distress among the operatives of America as among those of Great Britain. There was plenty of employment in the army or in the government work-shops for all industrious adult males, and the women readily found employment in the woollen mills, which the Cotton Famine and the government demand caused to be unusually active during the war. In Lowell, where the largest proportion of the cotton mills were idle, the deposits in the savings banks largely increased during the war.³

It is not my purpose to trace thus in detail the history of the British cotton trade and manufacture during the years of distress occasioned by the Cotton Famine. The

¹ Boston Board of Trade Report, 1865, 117.

² *Ibid.*, 1866, 47.

³ *Ibid.*, 1863, 98.

history of the British cotton industry for these years is one of the most interesting, as well as one of the saddest, chapters in the annals of Great Britain;¹ but my task is sufficiently large if I confine myself to this country. Such a short account as is necessary to give the statistics of the trade can alone be furnished here. The distress which began to be felt in Manchester in the autumn of 1861, when the mills began to close or to run short time because of the large stocks of cotton goods on hand, gradually passed during the succeeding winter into distress occasioned by the lack of raw cotton for resuming operations. The over-fed markets for cotton goods were unwilling to pay higher prices for these goods at the end of 1861 than they had paid at the beginning of 1860, while the price of American cotton, which had gone up to a shilling a pound, made resumption of spinning impossible under such conditions;² and by the time that a rise in the price of cotton goods occurred, the stocks of cotton had been sadly reduced by exports to the Continent and America, and importations from the United States had ceased. In March, 1862, *Hunt's Merchants' Magazine*³ said: "As yet the English market has not received a bag of our crop of 1861." At this time it was thought by the *London Economist* that with the stock on hand, which at the beginning of the year approximated 700,000 bales, and the expected arrivals from India, Brazil, etc., there would be enough cotton for the English mills, running two-thirds time, to last until July 1, 1862, "and no one can believe," says the writer, "that

¹ The history of the Cotton Famine has been recited in detail by an author to whom we have already referred, R. Arthur Arnold, "The History of the Cotton Famine from the Fall of Sumter to the Passing of the Public Works Act." London, 1864.

² Arnold, 88-9.

³ Vol. XLVI: 265.

this contest can be prolonged beyond that period without at least furnishing the required relief to the commercial world."¹ The Trent affair added to the political troubles during the winter of 1861-2, and the prospect of war still further disorganized the cotton industry of England. Intervention by England was, however, warmly opposed by Lancashire under the leadership of Mr. Bright, even though it was thought by many of the operatives that participation in the struggle by England would open the southern ports and bring relief.²

The pacific settlement of the Trent affair, and the knowledge that the southern states would be left to fight out their battles alone, now convinced the spinners that the war was to be a long one, and that a cotton famine was impending. By April, 1862, the consumption of the mills had sunk to one-half the rate of consumption for 1860, and the importations of cotton from America for the past six months had been less than the one-hundredth part of those for the corresponding period the preceding year.³ The annual report of Stolterfort, Sons & Co., of Liverpool, published this month, after reviewing the condition of the cotton manufacture in Europe, which everywhere in England, Germany, Spain, Switzerland, France, Belgium and Russia, was found to be languishing, said: "The cotton industry is at last threatened with what has often been apprehended, and which is more to be dreaded than a failure of the cereal crops. A 'cotton famine' is in prospect, and finds us still unprovided with means of drawing supplies from other quarters than the United States. The numerous schemes which are now starting up may provide a

¹ *Hunt's Merchants' Magazine*, XLVI : 266.

² Arnold, 113.

³ Arnold, 115-16.

supply a few years hence, for it is proved that the plant can be grown in many quarters of the globe; but this very circumstance, and the fact that it has not been grown, augurs badly for the future."¹

At the beginning of July, 1862, the stock of cotton at Liverpool was only 180,450 bales, as compared with 1,108,650 bales in 1861, and 1,297,030 bales in 1860.² American cotton had been almost entirely consumed by September, when there were only 17,000 bales of this kind in Liverpool. The importations from India had increased, and from this time the English mills were dependent on Surat, with small quantities received from other countries, for what time they undertook to run. The crisis of the famine was reached in November of this year, when the consumption which in normal times was 51,600 bales per week, had sunk to 18,000 bales per week. In Lancashire 247,230 operatives were out of work, and 165,600 were working short time. Only 121,129 were working full time, and 485,454 persons, 24.1 per cent. of the population, were receiving poor relief. The following table, taken from Mr. Ellison's "*Cotton Trade of Great Britain*" (p. 95), gives a statistical view of the condition of Lancashire during the famine:

¹ *Hunt's Merchants' Magazine*, XLVI : 388.

² Arnold, 170-1.

	1861	1862	1863	1864	1865		
	Last Week in Nov.	Last Week in Nov.	Weekly Av. 12 Mos.	Weekly Av. 12 Mos.	Weekly Av. 5 Mos.	Last Week in May.	Last Week in Nov.
Average weekly consumption of cotton in bales of 400 lbs.	Bales. 49,000	Bales. 18,000	Bales. 23,000	Bales. 27,000	Bales. 32,000	Bales. 34,000	Bales. 41,000
Operatives working full time.	No. 533,950	No. 121,129	No. 215,477	No. 243,012	No. 265,465	No. 319,616	No. 450,000
Working short time.		165,600	129,219	97,083	68,572	38,228	
Out of work.		247,230	189,167	133,847	106,916	86,001	
Total	533,950	533,959	533,863	473,942	440,953	443,845	450,000
Total reduced to the equivalent of full time	533,950	203,200	286,400	303,400	309,080	344,300	450,000
Estimated weekly loss of wages.	£	£ 169,744	£ 146,000	£ 96,444	£ 71,447	£ 51,413	£
Applicants relieved by guardians (out door) only.	No. 47,537	No. 69,015	No. 76,873	No. 71,374	No. 70,935	No. 63,199	No. 48,267
By guardians and committees.		181,573	80,681	22,040	9,706	3,872	
By committees only.		234,866	122,994	41,084	25,438	8,710	
Total number relieved.	47,537	485,454	280,548	134,498	106,169	75,784	48,267
Per cent. of population.	2.3	24.1	13.7	6.9	5.2	3.7	2.3
Expenditure by guardians.	£ 1,238	£ 17,943	£ 9,138	£ 7,099	£ 5,899	£ 4,966	£ 1,300
Expenditure by committees.		46,356	12,208	5,377	2,653	1,272	
Total per week.	1,238	64,299	21,346	12,476	8,552	6,238	1,300

In spite of the diminishing importation of cotton during the year 1862, the beginning of the following year still showed a large stock on hand, 160,561,870 pounds. The exports of cotton for the year had been almost equal to those of 1860. The explanation of this phenomenon is found in the higher prices prevailing in America and on the Continent, and in the fact that the stock of cotton goods had remained so large throughout the year that manufacturers could not afford to continue spinning and weaving at the high prices of cotton, especially when the despised Surat was their only supply. The year 1863 was a somewhat brighter one for the cotton trade of Great Britain, although the United States participated to but a slight extent in it. The total importation of the former country was 1,932,200 bales, only 131,900 of which came from the United States. This

was the year in which the famous "cotton loan" of the Confederate States was placed in England. The loan was for the moderate sum of £3,000,000 sterling and from the standpoint of the borrowers was a great success, for it was quite easily placed. The loan bore interest at 7 per cent. but the discount allowed practically made this 8 per cent. The loan was to run for twenty years and then be paid off at par. But the unique feature of the loan and that which led to its placement, was that any bondholder could, by giving sixty days notice, demand the payment of his bond in cotton at 6*d.* per pound, delivered to him in the interior of America, within ten miles of a railway, during the war; or, if he preferred to wait until the end of the war, he could within six months after the consummation of peace, receive his cotton at one of the southern ports.¹ Englishmen were led to make this risky investment because of the high prices which cotton was then bringing. It was estimated that even if, in undertaking to run the blockade, seven out of eight ships were captured, the eighth would make the transaction a profitable one.² About the only effect the loan had was to increase blockade running.³

Many of the British mills had by 1863 adapted their machinery to the manufacture of Surat cotton, "and perseverance aided by patience was slowly overcoming the difficulty and prejudice which were attached to the manufacture of Indian cotton."⁴ The consumption of the mills, stimulated by the new demand for cotton goods, increased this year to nearly 1,400,000 bales, or an average of 27,000 per week.

¹ *Hunt's Merchants' Magazine*, XLVIII : 288.

² Arnold, 424.

³ *Ibid.*, 508.

⁴ *Ibid.*, 425.

The back-bone of the Cotton Famine now seemed to be broken. Although the consumption for 1864 was only a little larger than that of the preceding year, the supplies from India proved sufficient to meet the demand at the high prices, and the employment of the operatives on government works reduced the number of applicants for relief to 135,000 per week. The following year brought the famine to an end, although imports equal to those of 1860 were not again reached until 1871.¹

With such fluctuations in the cotton trade, it is not surprising that the fluctuations in prices during the war were numerous and intense. Added to the dearth of cotton, which affected the foreign markets as well, the American market was affected by a more urgent demand for cotton goods, and by a paper currency so large that the price of gold at one time (July 8, 1864), went as high as 276½.² How much the prices of cotton during the war were affected by the value of the currency is uncertain. Certain it is that there was no close relation existing between the fluctuations in the prices of cotton and the prices of gold. The editor of the *Commercial and Financial Chronicle*³ thought that fluctuations in the prices of cotton were due "to the fluctuations in actual or anticipated demand and supply, and but very little, if any, to changes in the currency." As proof of his assertion he cites the fact that between the date of Lee's surrender (April 7) and the date of his writing (August 26), the premium on gold had "scarcely changed at all"; and such temporary fluctuations as had occurred corresponded in no way with the changes in the prices of cotton, which had gone all the way from 35 cents to 56 cents, and back

¹ Ellison, "The Cotton Trade," 94.

² Donnell, 608.

³ Vol. I: 258.

again to 43 cents during that time.¹ It seems scarcely possible, however, that the difference between British and American prices for "uplands," which our chart indicates,² could have been so great had it not been for our expanded currency.

Prices during the war followed closely the movements of the troops in the field. The belief in the existence of large stocks of cotton in the South caused a fall in prices whenever, by the winning of a battle or the capture of a port, the South was opened a little to the Federal armies. The failure of the cotton to come out caused the market to rise again. The highest point reached by cotton was on August 23, 1864, when middling upland sold for \$1.89 per pound on the New York market,³ and for \$1.95 in Boston.⁴ After the capture of Richmond was certain prices fell to 35 cents but subsequently rose, and for more than a year they did not again reach this point.

One of the most important results of the Civil War to the cotton trade of the United States, was the opportunity which it gave other cotton producing countries to develop their powers and to discover whether or not they were able to compete with the United States on the cotton markets of Great Britain and the Continent. Cotton had, of course, long been raised in considerable quantities in the West Indies, Brazil, Egypt, China and India, and the United States had only at the beginning of the century succeeded the West Indies as the chief source of supply for the Lancashire spinners. Brazilian cotton still competed with the New Orleans on the European markets,

¹ Donnell, 577-8.

² See chart, Appendix I.

³ Donnell, 522.

⁴ Boston, Board of Trade Report for 1865, 117.

and the demand for long stapled cotton had long since out-grown the scanty supply of sea-island, and the cotton of Egypt had been called into requisition to supply the deficiency. But the supply from all these countries was insignificant as compared with the quantity received in Europe every year from the United States.

India alone deserved the rank of competitor with the United States as a cotton producing country, but her cotton, chiefly consumed by her own domestic manufactures, was inferior in quality to the American cotton and was used in Europe only when mixed with the cotton of other countries; even then large imports were made into England only when the crop from the United States was a short one.

The fear of a cotton famine, which was ever present with the British manufacturers, caused them to establish the Cotton Supply Association, as we have seen, in 1857, to take measures for developing the cotton culture in various parts of the globe, and to relieve themselves from their dependence on American slave labor for their supplies. The Association began accordingly to send cotton seed, gins, cotton presses, etc., to the west coast of Africa, to Australasia, South America, Egypt, Turkey, India, the East and West Indies and other countries¹, and even to send planters from America fully equipped with all the necessary machinery to India to attempt the culture of cotton there according to American methods.

After the first great effort had been made, the committee in 1860 made a lengthy report.² While the possibility of producing cotton was shown to exist for many regions of the earth, the only countries which seemed likely to produce large quantities of cotton were India

¹ *Hunt's Merchants' Magazine*, XLIV : 677.

² See synopsis in *Hunt's Merchants' Magazine*, XLIV : 675-85.

and the west coast of Africa. In other countries where there was a suitable climate there was a lack of labor. "And in the west of Africa, though there was labor, the people were savage, the country was desolated by the warfare of hostile tribes, and the climate also was fatal to Europeans. Thus we were restricted to that great continent of India, which was now actually growing more cotton than any other portion of the Globe."¹ And while there were, no doubt, many disadvantages to contend with in the methods of cultivation, "the movers of this association believed, nevertheless, that there was a prospect not only of increasing the Indian supply to this country, but also of elevating the cotton to a level with that grown in America."² To India, therefore, the efforts of the Cotton Supply Association were principally directed, with such success that in spite of the increase in the shipments of American cotton, the imports of Surat into England had increased from 563,200 bales in 1860 to 986,600 bales in 1861. The American war, of course, was the most powerful stimulant in increasing the shipments from other countries, but the association took advantage of it to encourage the cultivation and importation of a better quality of cotton than had hitherto been received from the East. After the outbreak of the American war, a number of companies were formed in Great Britain to promote the importation of cotton from other countries.³

The early efforts to increase the cultivation of cotton in India, and the consumption of Surat in Europe seemed to meet with success. Nearly 700,000 bales of Indian cotton

¹ From address of Mr. Cheetham, president of the association, on June 11, 1865; *Hunt's Merchants' Magazine*, XLV: 379.

² *Ibid.*, 380.

³ *Ibid.*, 100.

were consumed by the English manufacturers in 1862, as compared with 350,000 bales in 1861, and 170,000 bales in 1860. British journals began to doubt whether England would ever again import much cotton from America, one journal going so far as to say that "the American plantations are practically abolished."¹ The ex-chancellor of the exchequer for India wrote a letter to the *Times*, estimating that after the termination of the American war, the importations from India would be "somewhere about 2,000,000 bales, with a permanent average price of 6*d.* per pound for Indian cotton in Liverpool; and 1,000,000 bales, more or less, for each 1*d.* per pound, more or less, in the price of the article."²

But the experiments in the mills of Lancashire of making cotton goods entirely from Surat, were not giving much corroboration to these predictions so flattering to the Indian cotton. Surat had always been in disfavor among the manufacturers of Manchester, and with the operatives its use was associated with hard times.³ Though it was possible to use considerable quantities of it in the manufacture of the rougher goods when mixed with a larger amount of American cotton, its consumption in England had hitherto been very small. Most of the Indian cotton imported had been re-shipped to the Continent, where the slower speed of the spindles favored the use of a shorter stapled cotton.

But the failure of American supplies now induced the English spinners to attempt the using of Surat in their own mills, and during the summer of 1862 the machinery in many mills was adapted to its manufacture.⁴ But the

¹ Quoted in *Hunt's Merchants' Magazine*, XLVI: 382.

² *Hunt's Merchants' Magazine*, XLVIII: 256.

³ Arnold, 166.

⁴ Arnold, 165.

trouble which it gave the operatives produced great irritation. The Surat was not only short in staple, but harsh and brittle. The high prices which any cotton then brought in Great Britain had caused the Indian planters to scrape together "the waste, the scrapings, the sweepings" of their crops, and to send them to Liverpool. The saw gin was not much used in India and the cotton was badly cleaned, and came into the factory full of seeds and leaves. The breaking of the threads was constantly causing the stoppage of the machinery, so that the operatives, who were paid by the weight of the spun yarn, often made less by working on this kind of raw material than they received from the charitable funds if they were unemployed.¹ Under such circumstances it is not surprising that most of them preferred to remain idle. The name "Surat" even became an epithet in Lancashire, so that a firm of brewers who had been termed "Surat Brewers," felt themselves so maligned that they sued the offending party for libel.² It is also related that a believing operative added to his pastor's prayer for increased supplies of cotton, the fervent request, "O Lord, but not Surat!"³

The necessity was too urgent, however, to allow these difficulties to stand in the way of the use of the Indian cotton, if its manufacture was possible, and its consumption steadily increased until 1865, when the British mills were consuming more Indian cotton than that of all other countries together. The importation of the Indian cotton reached its highest point in 1866, when 1,866,000 bales were received.

Of the other countries whose production was stimu-

¹ Arnold, 117, 299.

² *Ibid.*, 166.

³ "Speeches of John Bright," edited by Thorold Rogers (1869,) 102.

lated by the high prices, none of them gave signs of becoming successful rivals with America, although all of them continued to send large crops for some years after the war had closed. The largest shipments of Egyptian cotton, which comes little into competition with American short staple, were received in 1865, when 413,000 bales of this kind arrived in Great Britain. Importations from Brazil increased from 100,000 bales in 1861 to over 700,000 bales in 1872. The West Indies, vanquished by America early in the century, made a struggle for mastery again in the sixties, but gave it up after increasing importations into England from 9,700 bales in 1861, to 166,400 bales in 1872. The temporary efforts of other countries to increase production and exportation of cotton proved futile, and the close of the war left the future of the European, as well as of the American cotton industry, in the hands of the southern cotton growers.

CHAPTER X.

THE EVOLUTION OF THE COTTON MARKET.

Previous to the introduction of the factory system in England, the manufacture of cotton goods was carried on by spinners and weavers dispersed in cottages throughout the country, especially in the neighborhood of Manchester and Bolton. Owing to the inability of the spinners to make a cotton warp, the goods fabricated by the workers in this domestic industry were, as we have already noted, of the rougher sort of mixed goods, fustians or dimities. Of the supplies for this industry which were obtained "in the most irregular and uncertain manner,"¹ the linen warp came from Germany, Ireland and Scotland,² while the raw cotton came from the Levant.³ The stationary character of the industry, evidenced by the record of importations of cotton-wool during the seventeenth and first half of the eighteenth centuries, is to be explained, principally, by the primitive methods of marketing that were employed. The weaver was not only manufacturer but buyer and seller. He not only procured his own warp from the dealers in the large market towns such as Manchester or Bolton, but himself journeyed on foot throughout the country, collecting the weft from the spinners who with their one-thread spinning wheels were unable to keep pace with the weaving operations.⁴ When the cloth had been woven, it was again the weaver who carried it to the market towns and found a purchaser therefor.

¹ McHenry, "The Cotton Trade," 5.

² Schulze-Gaevernitz, "Der Grossbetrieb," 26-7.

³ Uré, "Cotton Manufacture of Great Britain," I: 188.

⁴ Baines, 115.

After the close of the wars between England and Holland, when, by the humbling of her commercial rival, England obtained the mastery of the seas and secured a wider market for her manufacturers,¹ the demand for cotton goods increased along with that for other commodities. The old methods of marketing, the weakness of which had long been painfully apparent, now became entirely inadequate. A new industrial personage now appeared, "the organizing merchant or middleman, who usurped the title 'manufacturer.'"² The new class took upon itself the oversight and responsibility of the industry, and the weaver became a wage-earner or piece-worker, although still carrying on his work at his own cottage and usually himself owning the implements of his craft. The ownership of the raw material and the care of the market had, however, passed out of his hands. The organizing merchant or independent "manufacturer" now bought the linen warp from the Bolton or Manchester dealers, and collected the weft from the spinners, delivered these to the weavers, and received from them the woven cloth which he carried to the market towns and sold. But the growth of the textile industries soon occasioned another division of labor. The work of oversight or superintendence became great enough to occupy the attention of the "manufacturer," especially where, as in the cotton industry of Lancashire, small factories manned by hired labor had begun to appear even before the introduction of steam power, or the invention of the new spinning and weaving machines.³ The "manufacturer" now assumed duties more in keeping with his title. He became the *entrepreneur*, alike

¹ Brentano, "Ueber die Ursachen der heutigen socialen Noth."

² Hobson, "The Evolution of Modern Capitalism," 36.

³ *Ibid.*, 39.

owner and manager of the manufacturing industry, while the care of the market and the obtaining of the raw material fell into the hands of the cotton merchant, dealer, or factor. This transformation in the methods of marketing had been accomplished by 1760.¹

The raw cotton which came into England² from Turkey and the West Indies during the early years of the cotton trade was imported by merchants of London and Liverpool, who sold it to the dealers or factors in Manchester and other cities from whom the manufacturers now obtained their supplies. Sometimes the manufacturers bought direct from the importers,³ but this, probably the earlier custom, was soon abandoned. Even the dealers who at first purchased directly from the importers, either at private sale or at auction, began to discover that with the increase in amount and varieties of cotton that began to appear on the British market in the closing years of the eighteenth century, they did not possess the technical knowledge of cotton required by their customers, and they began to employ a special class of skilled buyers or brokers to make their purchases for them. Sometimes the manufacturers themselves purchased through the brokers, but the amount of business done in this way was very small.⁴ These brokers, at first only the agents of the dealers or spinners, bought on direct orders issued by their patrons, and went to the warehouses of the importers and themselves examined the bales of cotton which they wished to purchase. For their work they received a commission varying from

¹ Schulze-Gaevernitz, "Der Grossbetrieb," 27.

² The description of the English cotton market which here follows is a summary of that given by Mr. Thomas Ellison in "The Cotton Trade of Great Britain," pp. 165-186, 272-280.

³ Ellison, "The Cotton Trade," 165-6.

⁴ *Ibid.*

$\frac{1}{2}d.$ to $1d.$ per pound, the commission being paid by the dealers or spinners for whom they bought.¹

London was for many years the leading port at which cotton arrived and the center of the cotton trade, but about the time that American cotton began to come upon the British market, Liverpool began to rival London as a cotton center, and by 1795 had gained a permanent superiority over her rival as a cotton port and market.²

As early as 1766 the Liverpool importers began to employ brokers to make sales for them, although the sales were still usually made at auction.³ Until the beginning of the present century, the most of the transactions in cotton had been made by men doing a general brokerage business, or by men engaged in other pursuits. Thus the first man who was a broker for the cotton trade only, was a man whose principal business as a stay-maker had brought him into contact with Manchester people, and this led to his adding cotton brokerage to his original calling.⁴

But as the growth of the factory system increased the demand for raw cotton, trade soon became extensive enough to warrant many of the brokers in abandoning their original pursuits and devoting themselves exclusively to the cotton brokerage, so that by 1800 there were a number of buying brokers as well as selling brokers, and a few who both bought and sold.

The increase in the business of the cotton mills of Lancashire led to an increase in the amount of cotton which a manufacturer could safely purchase, and the opening of the Liverpool and Manchester railroad in

¹ Ellison, 166.

² *Ibid.*, 170-1.

³ *Ibid.*, 167-8.

⁴ *Ibid.*

1810, furnished a quick means of obtaining supplies of cotton from the seaboard. Under these circumstances, the manufacturers who had been in the habit of obtaining cotton for their needs in small quantities from the local dealers of Manchester, began to employ brokers to purchase for them direct from the importer, thus avoiding the payment of two commissions. This innovation naturally provoked great opposition on the part of the dealers or factors, who attempted to boycott all brokers dealing directly with the spinners, but the boycott was fruitless, and the factors or dealers, of whom there were in 1815 over one hundred in Manchester alone, were obliged themselves to become brokers or to abandon the cotton business altogether. Henceforth the term "cotton merchant" when used in Liverpool referred to the importer.¹

The methods of buying had in the meantime also changed. The manner of packing and classifying cotton had greatly improved with the extension of the trade, and the buying broker, instead of visiting the warehouse of the importer as formerly, now bought by samples. These samples were at first displayed in the office of the selling broker, but were later sent to the office of the broker contemplating a purchase, in order that he might compare them with the samples sent by other brokers. This purchasing by sample greatly facilitated the brokerage business and commissions declined to one-half of one per cent., which, because of the greater number of transactions, still left a large profit to the brokers.²

The distance of Liverpool from the sources of cotton supplies, and the impossibility of obtaining any reliable

¹ Ellison, 176.

² *Ibid.*, 175-77.

information as to the condition of the cotton crops, caused speculation to hinge principally on arrivals of cotton. The reporting was very meagre in the early days. In 1787, prices current for all produce were published monthly by Messrs. Ewart & Rutson, giving the current prices and the tone of the market.¹ Particulars in regard to the sales, prices and arrivals of cotton were furnished by letters from the brokers to their principals. The imports of raw cotton into Liverpool nearly trebled in the decade following 1800, and so much cotton began to gather at the warehouses that the condition of the market became very unsteady. About 1805 three firms began to publish weekly reports of sales, imports and stocks of cotton, gathering the information thus published from the returns of the custom house, from the importing merchants and from brokers who had made purchases ahead of orders.² These returns were not very accurate until 1811, when the brokers, seeing the advantage of possessing exact information concerning the trade, by common consent joined in an effort to make the weekly reports as accurate as possible. This coöperation resulted, in 1841, in the establishment of the Cotton Brokers' Association, which took the responsibility of collecting the information for the reports which were still published by private firms. Not until 1864 did the Association begin the publication of a *Daily Table* of sales and imports. Ten years later a more complete *Daily Circular* succeeded this publication, and gave not only the statistics of the home trade, but also, now that the Atlantic cable was laid, information concerning the American crop.³

¹ Ellison, 178.

² *Ibid.*, 179.

³ *Ibid.*, 186.

Until the outbreak of the American Civil War the line between brokers and importing merchants had been quite strictly drawn. There were, it is true, brokers who sought to be both dealers and importers, and who often did not resist the temptation which the ignorance of the public concerning trade conditions gave them to speculate in cotton; but this was not a general custom, and the prevailing sentiment was that a broker should confine himself strictly to a brokerage business.¹ "There were brokers who both bought and sold, but they were the exception; the bulk of the selling was done by one set of brokers, and the bulk of the buying by another set. This arrangement suited all the parties concerned. It secured to the seller a servant whose interests were identical with the interests of the importer, and whose whole course of conduct was actuated by the same motives which would influence him if he were selling his own goods; while it secured to the buyer a servant whose interests were identical with the interests of the consumer, and whose whole conduct was as instinctively directed towards securing the welfare of the spinner as if he were himself a mill owner, not only in respect of the matter of buying cotton, but in respect of everything else affecting the interests of his clients."²

The laying of the Atlantic cable wrought an immense change in the operations of the cotton trade in Liverpool. The condition of the growing crop in America was made known to the broker and spinner now every day, and it was inevitable that spinners should take account of the information thus gained to regulate their purchases of the raw cotton. The blind speculation of the importing merchant as to what would be the arrivals

¹ Ellison, 244.

² *Ibid.*, 272-3.

of the succeeding weeks and months was replaced by a probability bordering on certainty and based on a knowledge of what were the crop conditions and prospects. It was also inevitable that merchants should attempt to foresee their needs, not only days but weeks and months ahead, and instead of piling up cotton in their warehouses, should attempt to supply their future needs by purchasing cotton when the market seemed the most favorable, which cotton should be delivered to them some weeks or months hence—in other words, that they should begin dealing in “futures.” But many of the brokers who, as we have said, had hitherto entered into but little competition with the merchants, themselves took advantage of the diminished risk in buying cotton from America, and began doing business direct with that country. The number of transactions between brokers which the system of buying and selling “futures” introduced was so great that in order to settle them the Cotton Brokers’ Association established in 1876 the Cotton Clearing House, through which all sales of “futures” transacted by the members of the association must pass.¹ But the importing merchants were not eligible to membership in the Cotton Brokers’ Association, and could not therefore participate in the advantages of the clearing house. If they wished to sell “futures” as a “hedge” against imports, they were compelled to do this through a member of the Cotton Brokers’ Association, and thus pay the commission not only for selling the actual cotton, but also for selling and re-buying “futures” sold as a “hedge” against their imports. Failing in their demands that they be admitted to membership in the Cotton Brokers’ Association, the merchants established the Liverpool Cotton Ex-

¹ Ellison, 275.

change, and announced their intention of boycotting the members of the Cotton Brokers' Association. This brought the latter association to terms, and an amalgamation of the two organizations resulted under the name of the Liverpool Cotton Association.¹

The development of the commercial mechanism for marketing the cotton crop in America has been very similar to that for Great Britain, except that both the demand and supply forces are represented on this side of the Atlantic. During the period of household manufactures, producer and consumer in the South were the same person, each family raising enough cotton for its own needs, and the women spinning and weaving it into the coarse garments worn by all except the richer classes. In the North the cotton consumed by the household manufacturers during the colonial period came chiefly from the West Indies, although small amounts came from Smyrna.² This cotton was either imported on the order of the consumer or dealer, in trade for articles needed by the West Indian producer,³ or by the ship owner who trusted to finding a market for it.⁴ Sometimes the sale of the cotton was guaranteed to the importer by the colony to encourage trading, and the towns were then ordered by the General Court to take certain specified quantities of the cotton wool and pay for the same, leaving the town to apportion it among its citizens.⁵ Trade soon became extensive enough, and the profits sufficiently remunerative to enable merchants either to buy and sell on commission, or to take the risk themselves of finding a market for cotton as well as

¹ Ellison, 277-8.

² Bishop, "History of American Manufactures," I: 330.

³ Weeden, "Economic and Social History of New England," 359.

⁴ *Ibid.*, 585.

⁵ *Ibid.*, 176; Bishop, I: 49, 300.

for other foreign commodities. The firm of Almy, Brown & Slater did their trading operations through commission merchants.¹ Even in the early days importing merchants seem to have suffered losses from poorly packed bales or bags of cotton. John Hull, a Massachusetts merchant, bought and sold two bags of cotton in 1672, but his customer finding "much fowle cotton" therein, claimed and received damages.²

After 1785, some of the cotton used by northern manufacturers was supplied by the new cotton fields of the southern states.³ The West Indies continued for some time, however, to be the principal source of supply.

We have seen that Liverpool had become the leading cotton market, and that the custom of buying and selling cotton through brokers had become well established, even before the advent of American cotton on the British market. When the textile industries were being established in this country, American cotton spinners, therefore, found the machinery of commerce in full operation. Liverpool so completely overshadowed all other ports as a cotton market that the American manufacturers were obliged to adopt the prevailing method of trading between the southern cotton growers and the merchants of that port. Besides the methods of trade were undoubtedly as well adapted to the American cotton industry as to the British trade.⁴

Poor means of communication and transportation made it hazardous for the manufacturer to undertake the risk of himself finding the supplies for his mill. Previous to

¹ Weeden, *Op. Cit.*, 913.

² *Ibid.*, 242.

³ *Ibid.*, 851.

⁴ For many points in the history of the development of the American cotton trade, I am indebted to Mr. Simmonds, an old New England commission merchant, and to Mr. Edward R. Powers, superintendent of the New York Cotton Exchange.

the Civil War there was little cotton sent overland. The lack of sufficient railroad facilities is in part the explanation for this, while custom, the greater cheapness of the water routes, and the fact that most of the cotton was shipped to Liverpool from the southern ports so situated as to have an easy water communication with the inland, are additional reasons why a water route was preferred.

The planter either shipped his cotton direct to ports on the Atlantic or Gulf of Mexico, and sold it to the factors located there,¹ or, as was more often the case, he sold it to merchants or factors in the interior towns which had an easy water communication with the port towns.² Where cotton had to be transported overland by wagons to the market towns, as was frequently the case, cotton often being hauled in this way for one hundred and fifty miles, the expense was very great. Many planters did not produce sufficient food for their own needs, and this had to be brought to them in the same way.³

The American cotton was sometimes consigned to the Liverpool or New England markets by the planters themselves if they produced enough and were familiar enough with the markets to make this risk a profitable one. But this was not a widespread custom. Few planters were in a position to take the risk which this process involved, or to await payment for so long a time. The custom began early in the century, if indeed it did not exist even before the culture of cotton began, for the planter to obtain advances on the growing crop.⁴ Thus it happened that the cotton factors located at the ports of the southern states advanced money to the planter,

¹ Mills' "Statistics of South Carolina," 517, 543, 747.

² *Ibid.*, 543, 590, 708.

³ *Ibid.*, 776.

⁴ Ramsay, "History of South Carolina," II: 222.

either directly or through the country merchants, and took the crop then growing or about to be planted, as their guarantee of payment. Most of the cotton, therefore, found its way to the North as well as to Liverpool, through the hands of southern factors who played a much more important part in the cotton trade before the Civil War than they do at present.¹ The southern factor disposed of his cotton through a broker, paying him a commission therefor of usually \$1.50 a bale, but the broker paid out of this the commission to the northern broker. The cotton thus sold was usually bought by similar factors or importing merchants at northern ports, as we have seen was the case in Liverpool. Sometimes, it is true, the New England manufacturer dispensed with the services of this northern factor, and bought direct through his broker from the southern factor.² The shorter time which it took for cotton to reach the North than it did to arrive at Liverpool, made the risk which the manufacturer ran from falling prices, much less than would have been the case if the British manufacturer had undertaken to thus dispense with the importing merchant. The cost of transporting cotton from New Orleans to northern ports was about one-half what it was to Liverpool.³ But like the southern planters, not many of the northern manufacturers were so situated that they could take this risk or afford to stock their warehouses with large supplies of raw cotton. Most of them bought from the importing merchant or northern factor cotton as they needed it. A few of them bought directly from the merchant, the more suspicious ones going themselves to the warehouses

¹ *Hunt's Merchants' Magazine*, IV : 224. Baines, 317.

² Uré, "Cotton Manufacture of Great Britain," I : 148.

³ *Ibid.*, 146.

to inspect the cotton which they wished to purchase;¹ but more often they purchased through brokers, who bought and sold by sample, charging a commission of fifty cents a bale for their services. In New England this commission was paid by the seller. When New York brokers were employed, the custom was for the buyer and seller each to pay half the commission. As the commission ultimately came out of the buyer, this technical difference was an unimportant one. The manufacturers, especially the small ones, carried very small stocks of cotton, seldom for more than a few weeks or a month in advance of needs, or, if they were near the seaports, not even for so long a time.

The methods of obtaining information previous to the Civil War were very poor as compared to those of the present day, and such information as was gathered was of doubtful reliability. Liverpool, the great market for cotton, according to the prices of which the American market was largely governed, was from fifteen to thirty days away. Telegraph and railway communication with the South, especially with the great cotton fields of the Southwest, was very inadequate. Cotton was shipped almost entirely by water route, and sudden floods might raise the rivers to such a height that cotton from whole sections would be cut off for weeks from a market.²

¹ Mr. Simmonds tells me that it was "only the old fashioned ones" who did this. This seems to indicate that in America, just as in England, the earlier custom had been for the manufacturer to purchase from the merchant direct, after a personal inspection of the cotton. See page 280.

² The records of the overland movements previous to the war, as far as we possess them, are as follows :

Fiscal Year (ending June 30). Bales.	Fiscal Year. Bales.	Fiscal Year. Bales.
1835-36	100	1853-54 12,430
1839-40	3,250	1854-55 7,661
1851-52	175	1855-56 14,215
1852-53	9,740	1856-57 4,754
		1857-58 9,624
		1858-59 85,321
		1859-60 108,676
		1860-61 143,424

Report on the Internal Commerce of the United States, 1882, 81-2.

The brokers in New Orleans, New York or other ports were in the habit of exchanging bits of information which they had gathered from various sources. There was no report issued based on coöperative efforts of the brokers, but the daily papers published the prices made up by various firms of brokers; each paper used a different broker, and the accounts, consequently, varied considerably.¹ Under such circumstances, speculation was little more than a blind guess at the market and crop possibilities. No attempt was made either in England or America to deal in "futures." There was considerable speculation in "spot cotton," and speculators having private information sometimes days ahead of a public knowledge of circumstances and conditions, often made advantageous sales or purchases.

The Civil War caused speculation in the cotton market to run high, both on the Liverpool and New York markets. The effectual blockade maintained by the Federal authorities almost completely cut off the world from its chief source of cotton supplies by water, and the arrivals overland were but few and uncertain. The demand of the northern spinners was intensified by the contracts which many of them had entered into with the government to furnish cotton goods, and fabulous prices were paid for raw cotton. The market responded closely to the victories or reverses of the Federal armies, and prices sometimes advanced or declined twenty or thirty cents within a day or two. The demand for cotton became so urgent that manufacturers were willing to pay almost any price in order to be guaranteed a supply of cotton, and it was now that the custom of buying cotton for future delivery arose.² The system of buying and sell-

¹ Dana, "Cotton from Seed to Loom," 194-35.

² Donnell, 514, 614.

ing "futures" having arisen, offered so many advantages to those desiring to speculate in cotton that the business grew rapidly during the war and continued to grow after its close, especially after the laying of the Atlantic cable had put the brokers into possession of daily information from the Liverpool market, and the re-establishment of telegraph communication between North and South had afforded the possibility of obtaining information as to the condition of the growing crop. Such meagre information concerning the crops and the markets as the brokers had hitherto possessed were furnished by the *New Orleans Price Current* and the *New York Shipping List*, in addition to the circulars issued by private firms.

In 1865 began systematic attempts on the part of the Bureau of Agriculture at Washington and the *Commercial and Financial Chronicle* of New York to obtain and publish information in weekly and monthly reports on the existing state of the market and the probabilities as to the future supply of cotton and the need for consumption. *Bradstreet's* began a somewhat similar work in 1873, and the following year there began a co-operative movement on the part of the cotton exchanges organized under the name of the National Cotton Exchange, to obtain and publish more complete and accurate statistics of the cotton trade and movements. The information thus gathered was furnished in weekly reports. The National Cotton Exchange was abandoned after a few years, but its work has since been carried on in daily reports to the exchanges, the material for which is collected by the New Orleans Cotton Exchange under the direction of Mr. Henry G. Hester. The reports of these various authorities, especially those pertaining to the conditions of the crop and the estimates of the prob-

able demand and supply of cotton for succeeding months, by which brokers and speculators are guided in their sales and purchases, are sometimes far from accurate. The tendency of almost all correspondents seems to be to under-estimate the yield of the growing crops.¹ In anything of so variable a nature as agricultural production, an accurate estimate is of course impossible. The reporting is becoming every year more and more successful, and the chances of speculative gains and losses are diminishing. The movement of the crop to market each year is a surprisingly regular one, and as the cotton is closely watched by the statisticians as it comes into sight and reported to the exchanges, it is possible to predict very closely after the first two or three months what the total crop for the year will be. The following table, condensed from one prepared by the New Orleans

PERCENTAGE OF COTTON CROP MARKETED FOR EACH SEASON
AT CLOSE OF EACH MONTH.

Month.	1880-1	1881-2	1882-3	1883-4	1884-5	1885-6	1886-7	1887-8
September . . .	8.14	9.98	5.75	7.88	7.30	7.41	6.68	11.74
October	25.89	29.61	22.64	31.08	30.39	28.19	27.14	34.38
November . . .	44.14	51.49	42.70	54.14	54.90	50.23	51.39	57.75
December . . .	63.45	75.30	63.23	76.27	78.92	72.95	73.51	76.84
January	72.40	83.77	74.72	84.22	87.97	81.23	83.68	85.55
February . . .	82.44	89.31	84.22	90.70	93.12	88.54	90.60	89.82
March	90.05	93.13	91.64	95.30	96.52	93.15	94.52	93.27
April	93.92	95.35	95.44	97.18	98.00	95.98	96.03	95.06
May	96.20	96.91	97.84	98.18	98.60	97.72	96.85	96.66
June	97.52	97.85	98.87	98.69	98.78	98.42	97.41	97.67
July	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
August }								

Month.	1888-9	1889-90	1890-1	1891-2	1892-3	1893-4	1894-5	1895-96
September . . .	6.11	9.15	9.90	9.21	8.00	6.69	6.77	7.38
October	27.64	31.46	30.05	31.69	29.84	28.51	28.40	31.34
November . . .	49.50	53.38	48.75	52.93	51.97	50.70	50.52	49.46
December . . .	71.52	75.60	67.89	71.34	71.50	72.40	70.64	68.27
January	82.94	86.09	79.07	79.78	79.94	82.84	80.94	76.91
February . . .	90.44	92.26	86.22	88.06	86.18	87.64	86.73	83.92
March	95.37	95.14	91.57	92.90	90.59	91.62	92.87	89.43
April	97.24	96.78	95.20	95.91	93.61	94.92	96.33	92.47
May	98.09	97.71	97.49	98.07	95.83	96.79	97.94	94.75
June	98.56	98.18	98.74	99.27	97.12	97.91	98.75	96.06
July	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
August }								

¹ For a full description of the methods of obtaining information and a criticism thereof, see the supplement to *Bradstreet's* for September 27, 1884.

Cotton Exchange, gives the percentage of the crop brought to market by the end of each month for a series of years, and shows better than can any mere statement the regularity and uniformity of movements of this great staple.

In addition to the system of buying and selling "futures," which is probably the greatest change that has been made in the methods of buying and selling cotton, the manner of marketing the crop has undergone a considerable change since the war. The cotton factor or merchant of the southern port has ceased to be the important personage that he was previous to 1860. The disturbance given to southern agriculture and commerce by the war left these factors with claims on the planters for future crops which either were not raised or could not be marketed. Many factors were thus completely ruined by their inability to obtain the crops on which they had made advances, and they abandoned the business. But if the war had ruined the money lender at the South, it had not relieved the planter from the necessity of borrowing and of obtaining advances on his crops. While the merchant at the port became of less importance to the cotton trade, the country merchant in the interior became of vastly more importance. The decrease in the size of farms and the increase in the number of renters, made the necessity of obtaining local credit the more urgent, as the small farmer could not furnish the security which made it desirable for money lenders at a distance to advance him the desired funds. But the country merchant was able to make advances in the shape of food, mules, agricultural implements, etc., and could himself secure credit from the wholesale dealer, importer or manufacturer.

With the decline of the business of the cotton factor

at the ports, and as the chief cause contributing to this decline, there came the increase of interior buying. The extension of the railway and telegraph lines throughout the South made it easy for the New England and Lancashire spinners to obtain supplies direct from the interior. In some cases they have done this themselves by sending their agents to various points in the South, instructing them to buy cotton and send it direct to the mills; but usually they have preferred to make use of that great class of nineteenth century traders, the brokers. The mill treasurer "has now only to put a few packages of cotton outside of his door, thereby indicating that he is buying, to receive calls from a great number of persons anxious to provide him with material."¹ These men are called "buyers," but they are in reality brokers. Having named the prices at which they can deliver cotton to the manufacturer, which they are able to do because the telegraph has put them into easy communication with all points in the South, and having received their orders, the brokers immediately telegraph to one of their agents among the brokers who are scattered throughout the South. These southern brokers go to the country merchants, or may even buy from the planter the cotton which he has brought to market.² This latter practice, called "wagon buying," is, however, seldom followed. The planter has usually pledged his crop months ahead to the merchant for cash or supplies, and can exercise no freedom in selecting a purchaser for his cotton.

Having purchased his cotton for cash and shipped it to his consignee at the North or in England, the southern broker procures a bill of lading and with this evi-

¹ *Bradstreet's*, XIII : 227.

² *Ibid.*

dence that cotton is on its way, he is enabled to draw a draft on his consignee and cash it at some bank at the shipping point, thus procuring his pay days or even weeks previous to the delivery of the cotton at the factory. The advantages which this new method of marketing possesses are these: To the manufacturer there is a saving in the cost of transportation, cotton now being shipped direct from the interior to the factory, thus saving the expense of drayage and storage at the ports as well as avoiding the payment of one or more commissions, the usual charge for brokerage by the new method being fifty cents a bale, which commission is divided between the northern and southern brokers.¹

To the country merchant or planter the new method of marketing furnishes a buyer at the home market who can and does make cash payments for cotton purchased. It has been estimated that a saving of one-quarter cent per pound is made by the new method.² But in spite of the undoubted advantages which the new method of marketing cotton (which, especially since 1876, has become widespread) gives to buyer and seller, there are still many obstacles to its introduction and some disadvantages connected with it in practice. The dependence which the cotton planters or country merchants sometimes have on the commission house in the large city, compels many of them to promise to give the marketing of their cotton into the hands of the factor, in order to obtain advances for planting a crop or carrying on business.

Thus the factor's business is still important at such inland towns as Augusta, Ga., Montgomery, Ala., and

¹ *Bradstreet's*, XIII: 227. There is no fixed charge for brokerage in buying and selling "spot cotton," Mr. Powers tells me, not even on the New York Cotton Exchange.

² *Ibid.*

especially at Memphis, Tenn., where planters and merchants often send their cotton to be sold for them on commission. Besides, many of the buyers throughout the country are agents for these houses in the port cities, and they come into competition with the buyers for the New England or British mills.

But there are reasons affecting the mill owners as well as the planters and merchants which have prevented the new method of buying from becoming universal. One reason is the irresponsible character of some of the buyers.¹ According to the law of "the survival of the fittest," always operative in commercial matters, this obstacle is not likely to be a lasting one. Another and more serious difficulty lies in the fact that under the new system the buyer has no such opportunity to inspect the cotton purchased as when it is in a warehouse, and mill owners often find the cotton delivered to them of a quality inferior to that desired.² Some of the mills, especially the smaller ones, are not in a position to make purchases for so long a time in advance, or are afraid of losing by falling prices, as the new method followed to its logical conclusion consists in selling "futures" against expected arrivals, and thus diminishing the risk. Many mill owners are afraid of the future delivery business, or are opposed to it on principle.³ It will be a long time, therefore, before the business of the factor has become so unremunerative as to compel the complete abandonment of this method of buying and selling cotton, although that the new method of marketing is becoming every year more and more universal is apparent to all interested in the cotton trade. The decline in the sales of

¹ *Bradstreet's*, XIII : 227.

² *Ibid.*

³ *Ibid.*

"spot cotton" at the principal ports, though not an absolute measure of the increase of interior buying, is an index to its growing importance. The following table gives the annual sales of spot cotton at five leading ports for the past twenty-two years:¹

ANNUAL SALES OF "SPOT COTTON" IN NEW YORK, CHARLESTON, SAVANNAH, MOBILE, NEW ORLEANS AND GALVESTON SINCE 1875.

	New York Bales.	Charleston Bales.	Savannah Bales.	Mobile Bales.	New Orleans Bales.	Galveston Bales.
1874-5	448,064	309,069	226,898	260,000	1,057,200	238,841
1875-6	372,642	326,447	255,660	343,000	1,446,400	340,858
1876-7	404,018	368,322	226,205	303,000	1,185,000	328,311
1877-8	327,717	375,534	270,461	340,000	1,271,600	267,507
1878-9	277,147	451,130	347,670	251,000	1,136,200	263,708
1879-80	311,140	388,498	362,248	275,000	1,544,900	233,428
1880-1	314,504	546,935	509,298	220,000	1,384,500	363,744
1881-2	368,630	419,182	449,602	200,000	1,233,000	246,241
1882-3	264,764	551,931	446,477	210,000	1,196,360	401,949
1883-4	310,577	395,151	320,421	160,000	1,164,470	253,282
1884-5	179,277	444,412	305,005	150,000	972,720	162,041
1885-6	211,288	471,488	309,849	160,000	1,072,300	204,736
1886-7	202,938	372,740	270,039	119,000	806,925	215,183
1887-8	291,815	414,386	304,347	146,000	961,011	180,000
1888-9	432,892	304,008	294,344	139,000	863,060	208,000
1889-90	271,036	244,552	259,089	133,000	1,034,417	166,000
1890-91	146,805	290,969	271,356	179,000	1,154,300	173,000
1891-2	180,171	231,000	275,836	161,000	1,228,050	239,000
1892-3	188,656	185,000	209,815	94,000	866,300	216,000
1893-4	204,238	201,500	198,344	118,000	983,329	220,000
1894-5	253,753	135,000	163,364	124,000	1,128,800	334,000
1895-6	342,712	99,641	103,913	75,000	865,660	135,000

Closely associated with the purchase of cotton in the interior, and its shipment on through bills of lading direct to the factories, is the increase in the overland movement, which has taken place since the war.² There is, however, no necessary interdependence between these two movements. Much of the cotton which passes

¹ The data for this table have been furnished by the secretaries of the cotton exchanges located at these ports, in some cases directly, and in others through the Report of the Senate Committee on Agriculture and Forestry, (53d Congress, 3d session, No. 986, Vol. II: p. 545) and through Shepperson's "Cotton Facts."

² Report on the Internal Commerce of the U. S., 1882, 84.

through the ports has been purchased in the interior, and is consigned direct to the factory. Necessarily, all the cotton which goes abroad must pass through the the port, whether or not it was purchased in the interior. On the other hand, there is no reason why sales transacted in the exchanges of the port cities should not be of cotton shipped from the interior direct to its destination, whether by an all rail or an all water route. Nevertheless, it remains true that the same development in methods of communication and transportation which has led to an increase in interior buying, has facilitated the shipment of cotton by an all rail route, thus avoiding the necessity of unloading and reloading the cotton at the ports. Even where the cotton does not go all the way by rail, much of it now travels to the seaboard cities by rail, where there are reasonably good facilities for sending it by water. Lines of railroads parallel the Savannah, the Alabama and the Mississippi rivers, and carry the cotton to Savannah, Mobile, New Orleans, Memphis and St. Louis, which formerly found its way to these ports entirely by means of the river craft. So, too, much of the cotton trade of Wilmington, N. C., Norfolk, Va., and the northern cities, is due rather to arrangements entered into between railroads and coastwise or trans-Atlantic steamers sailing from these ports, than to the fact that these ports are the natural outlets for this cotton.¹ Thus some of the cotton raised in Central Alabama and Northern Mississippi finds its way to market through Norfolk.

For a time after the war the total overland movement, which before the war, as we have seen,² was very slight,

¹ Report on the Internal Commerce of the U. S., (1882), 84.

² Page 291, note 2.

grew at a more rapid rate than did the increase in the cotton crop. But during the last nine years the gross overland movement has scarcely held its own, and its increase has been less rapid than has the increase in the crops grown, although during the twenty years ending with 1895 the rail movement increased nearly 165 per cent. against a gain in total yield for the like period of about 112 per cent.¹ Cotton not being a perishable commodity seldom requires rapid transportation, and the usually greater cheapness of a water route is likely to give this method of shipping cotton the preference for some years to come.

In the preceding pages, reference has several times been made to the great change which in recent years has been wrought in the methods of marketing cotton by the introduction of the system of buying and selling for future delivery. The system is of so much importance to the cotton trade, and it has been the subject of so much criticism within the past few years by people who are either not familiar with its workings or have not appreciated its service to the cotton trade, that it seems best to devote some attention to a discussion of the system and to describe, even at the risk of being tedious, the method of dealing in "futures" on the American cotton exchanges, and the uses which the commercial world makes of this system.

There seems to be no clear idea as to just how and when the system of trading in "futures" began on the cotton market. Mention has already been made of transactions of this character having been carried on in Liverpool early in the century.² The earliest transac-

¹ *Commercial and Financial Chronicle*, LXI: 404.

² See page 235. According to the statement of Mr. Alfred B. Shepperson, an organized system of trading in "futures" began on

tion in "futures" in New York which Mr. Edward R. Powers, who has been superintendent of the New York Cotton Exchange since 1873, can recall, was where a broker contracted with a manufacturer who was anxious in regard to the future supply of cotton for his mills, to furnish him each month for a year with a certain amount of cotton, the prices for each month being also agreed upon. This transaction, Mr. Powers thinks, was made even before the Civil War. It was doubtless in some such simple beginning that the system of future delivery contracts had its origin. But it was during the Civil War that the first great extension was given to the system on the cotton markets. Manufacturers with heavy contracts for future delivery of cotton goods to the government on their hands, had to be guaranteed a supply of cotton at whatever prices might be established. With the great cotton fields of the world in the hands of the enemy, with the means of transportation and communication subject to constant interruption, and with the destruction of cotton incident to warfare, the risks of trading in the ordinary way were too great for the manufacturer to undergo, and he was glad to turn them over to a body of traders who willingly assumed them, because of the large profits which were sure to result from a favorable issue of trading. The addition of the future delivery business so largely increased the number of transactions between brokers, that in September of 1870 the New York Cotton Exchange was organized to regulate all the commercial relations of the brokers engaged in the cotton trade of that city, but "primarily for the control and regulation of the new ('futures') system."¹

the cotton market of Havre, France, as early as 1855. Report of Senate Committee on Agriculture and Forestry, I: 453.

¹ Alfred B. Shepperson in Report of Senate Committee, I: 453.

Since the organization of the New York Cotton Exchange, cotton exchanges have been established in many southern cities, until now they are to be found in Norfolk, Va., Charleston, S. C., Savannah and Augusta, Ga., Mobile, Ala., New Orleans, La., Galveston and Houston, Tex., Memphis, Tenn., and St. Louis, Mo. In other cities the cotton business is carried on in connection with the produce exchanges. On only two of the American exchanges, those at New York and New Orleans, has there been an extensive business done in the sale and purchase of "futures." Some of the other exchanges have experimented with the system, but have found the amount of business done too small to warrant a continuance of it.¹ At two foreign ports, Liverpool and Havre, the business of buying and selling "futures" has been carried on for some years.

The growth of the business since its organization under the rules of the New York and New Orleans cotton exchanges, is shown in the following table :

ANNUAL SALES OF "FUTURES" ON THE NEW YORK AND NEW ORLEANS COTTON EXCHANGES ²

Year Ending Aug. 31.	New York. Bales.	New Orleans. Bales.
1871	2,512,200	
1872	4,963,500	
1873	5,299,700	
1874	6,187,500	
1875	8,357,600	
1876	7,233,600	
1877	10,908,600	
1878	13,009,900	
1879	25,416,500	
1880	33,976,600	2,033,000

¹ Plans have been formulated for introducing the future delivery system on the Charleston Cotton Exchange, but these plans have not yet been realized.

² Figures for New Orleans furnished by New Orleans Cotton Exchange ; for New York, from Report of Senate Committee, I : 460, and by New York Cotton Exchange.

1881	28,124,700	10,115,000
1882	32,200,300	16,171,000
1883	26,542,600	13,054,000
1884	24,334,800	9,588,000
1885	20,058,100	8,037,000
1886	22,683,200	7,475,900
1887	26,186,200	11,237,000
1888	24,759,700	9,649,500
1889	19,155,700	6,570,600
1890	21,107,600	6,782,000
1891	24,433,700	8,555,300
1892	34,359,800	12,131,400
1893	53,273,500	16,516,700
1894	37,858,300	12,649,600
1895	32,110,100	14,648,700
1896	54,689,600	15,497,000

In its essence, "the future delivery sale" is a very simple thing. A & Co., a firm of brokers, members of the Cotton Exchange, agree to deliver to B & Co., another firm represented on the same exchange and who may be buying for themselves or for other parties, a certain number of bales of cotton at a stated future time, the price per pound being agreed upon at the time the contract is entered into. The form of contract employed at the New York Cotton Exchange, which is almost the same in wording as the one used at New Orleans, is as follows :

NEW YORK COTTON EXCHANGE.

CONTRACT.

New York, 18 . .

In consideration of one dollar in hand paid, receipt of which is hereby acknowledged, have this day sold to (or bought from), 50,000 pounds in about 100 square bales of cotton, growth of the United States, deliverable from licensed warehouse, in the port of New York, between the first and last days of . . . next, inclusive. The cotton to be of any grade from Good Ordinary to Fair, inclusive, and if stained not below Low Middling (New York Cotton Exchange, inspection and classification), at the price of . . . cents per pound for middling, with additions or deductions for other grades, according to the rates of the New York Cotton Exchange

existing on the day previous to the date of the transferable notice of delivery. Either party to have the right to call for a margin, as the variations of the market for like deliveries may warrant, and which margin shall be kept good. This contract is made in view of, and in all respects subject to, the rules and conditions established by the New York Cotton Exchange, and in full accordance with Article II, Title IV, Chapter second of the by-laws.

(Signed)

Verbal contracts (which shall always be presumed to have been made in the foregoing form), shall have the same standing, force and effect as written ones, if notice in writing of such contracts shall have been given by one of the parties thereto to the other party during the day on which such contract was made, or on the next business day thereafter.¹

"Futures" are bought and sold entirely by members of the Exchange, within Exchange hours, and across the trading ring.² There is, of course, nothing to prevent any person entering into an agreement with a merchant or spinner to furnish him with cotton at a specified time and price, but if he wishes to have his contract enforced by the Exchange, or to buy from one of its members, he must be a member of that body or employ a member to transact his business for him. All members of the Exchange are obliged to report to the collector the contracts for future delivery which they have entered into, within ten minutes after the sale has been agreed upon,³ and the Exchange holds its members to the strictest account for the fulfilment of all contracts entered into, with the penalty of heavy fines, suspension and even expulsion for non-fulfilment of contract.

When the time for settlement of the contract has arrived, there are three ways by which this may be done:

1. If A & Co. have sold to B & Co. 50,000 pounds of cotton for December delivery (seller's option), at least

¹ Charter, By-laws and Rules of the New York Cotton Exchange, 1894, 61-2.

² *Ibid.*, 51, 61, 104.

³ *Ibid.*, 81-2.

five days before they intend delivering the cotton, they send B & Co. a notice of their intention.¹ B & Co. now send notice to A & Co., at least the day before the one set for delivery,² of their willingness to receive the cotton,³ and upon the day set for delivery return to A & Co. their notice and receive, upon payment of the price stipulated, a warehouse receipt for their cotton. In place of there being two parties to the transaction, however, there may have been a larger number, perhaps twenty. Thus B & Co., who have bought from A & Co., 50,000 pounds of cotton for December delivery, at ten cents per pound, may have at an opportune moment, sold to C & Co. 50,000 pounds, December delivery, for 10.10 cents per pound. C & Co., after a few days have seen the market decline and have sold out for 9.95 cents to D. & Co. Thus the sale may proceed, D & Co. selling to E & Co.; E & Co. to F & Co., and so on. When December arrives, A & Co., as in the other case, send to B & Co. notice of their intention to deliver, which notice reads as follows :

TRANSFERABLE NOTICE.⁴

. . . o'clock.

New York, . . . 18

To (B & Co.)

Take notice that on we shall deliver to you 50,000 pounds in about one hundred square bales cotton in accordance with the terms of our contract sale to you dated , at (ten) cents per pound. We pledge ourselves to deliver at or before 2 p. m. on the day specified for the delivery, to the last holder hereof a warehouse certificate or certificates of grade upon written notice by the last holder of this notice of the holding of the same to us, one half

¹ Rules of New York Cotton Exchange, 110.

² *Ibid.*, 112.

³ Of course B & Co. must receive the cotton, unless they claim that, for some reason the transaction was a fraudulent one, in which case they file a protest with the Exchange which body determines the matter.

⁴ Rules of the New York Cotton Exchange, 111.

hour or more before the closing of the Exchange on the day previous to the one herein specified for delivery of the cotton. This notice to be delivered to us simultaneously with our delivery of the warehouse receipt or receipts and inspectors certificate or certificates of grade, to the holder thereof.

(Signed A & Co.)

Appended to this transferable notice are the following

CONDITIONS.¹

In consideration of one dollar paid to each of the acceptors, the receipt of which is hereby acknowledged, it is agreed that the last acceptor hereof will, one half hour or more before the close of the Exchange on day of, give written notice to (A & Co.) and on the following day receive from (A & Co.) a warehouse receipt or receipts, and inspectors certificate or certificates of grade for about 100 square bales, and pay them the full amount of (10) cents per pound therefor, settling with them on the basis of middling, with allowances for variations in grade in accordance with the quotations of the New York Cotton Exchange, existing on the day previous to the date of this notice. It is further agreed that each acceptor hereof shall continue his (or their) liability to each other for the fulfillment of this contract until this notice shall have been returned to (A & Co.), and a warehouse receipt or receipts for the cotton to be delivered, is received by the last acceptor hereof from (A & Co.), at which time all responsibilities of intermediate parties shall cease.

(Signed, B & Co.)

Having received from A & Co. the above notice and signed the conditions, B & Co. sign also the following form of transfer which, together with the transferable notice and conditions, they, within twenty minutes,² pass on to C & Co.

FORM OF TRANSFER.³

. . . o'clock.
To (C. & Co.)

NEW YORK,, 18..

We accept the above with all its conditions and obligations, and you will please take notice that in accordance therewith we shall deliver you 50,000 pounds in about 100 square bales, cotton, on account of our contract sale to you dated The cotton to be paid for at the price of transferable notice.

(Signed.)

B & Co.

¹ Rules of New York Cotton Exchange, 111-12.

² *Ibid.*, 110.

³ *Ibid.*, 112.

At the time of receiving this transfer and notice, C & Co. pay to B & Co. the difference between their contract price and the price in the transferable notice¹ (in the above case 10-100 cents per pound) and A & Co. are now responsible for the delivery of the cotton to C & Co.

With a similar set of conditions and transfer signed, C & Co. pass the notice to D & Co., receiving from, or as we have supposed in the above case, paying to, D & Co. the difference between their contract price and that in the notice. The notices continue thus to pass along, each buyer settling his difference with the preceding, until the last man in line presents it to A & Co., and on paying the price stated in the transferable notice, receives from them the warehouse receipt for his cotton.

2. The second form of settlement is known as "cancelling the contract," and is the method employed when only two parties are concerned, each of whom has bought from the other a like quantity of cotton to be delivered in the same month. In this case the contracts are simply canceled, and the difference between them is paid.²

3. The third form of settlement is called "ringing out," and is the method by which the majority of the contracts for future delivery entered into on the cotton exchanges are settled. It is in reality only the extension of the second method, that of "cancelling the contract", to cases where more than two parties are concerned. Suppose in the case of the parties referred to in describing the first method, A & Co., who have sold December cotton to B & Co. for ten cents per pound, later, because of a decline in the market, decide to

¹ If the difference is in favor of C & Co., of course B & Co. pay it.

² Rules of New York Cotton Exchange, 105.

"cover their contract" and buy of F & Co. 50,000 pounds of December cotton for 9.50 cents. But, as we have supposed in the above case, F & Co. bought 50,000 pounds of December delivery from E & Co., who bought it from D & Co., who bought it from C & Co., who bought it from B & Co., who bought from A & Co. Each party having thus bought and sold 50,000 pounds of cotton deliverable in the same month, it would be useless to go through the process of delivering. With the consent of all the parties, a "ring" is therefore formed and the "differences" are settled. The reason why "ring clearances" are the usual mode of settlement for future delivery contracts, is because, according to the rules of both the New York and the New Orleans exchanges, all contracts for future delivery are for "50,000 pounds of cotton in about 100 square bales." As nearly all the members of the Exchange are both buying and selling continually and the sales are posted, it is not difficult for any member to find parties with contracts similar to his own who are willing to form a "ring" for the purpose of settlement.¹

We have thus far described only the method of dealing in "futures" on the cotton market.² Let us now see what use the commercial world makes of this system.

A New England manufacturer receives early in autumn an order for a quantity of cotton goods, sufficient to keep his mills running all winter. The order

¹ From calculations made by him, Mr. Alfred B. Shepperson has arrived at the conclusion that "the proportion of the deliveries of cotton to the sales of 'futures' " on the New York Exchange, for the six years ending Aug. 31, 1893, was about 1 to 10. Report of Senate Committee, I: 459.

² The method of dealing in futures on the wheat market has been more fully described than I have been able to do for the cotton market, by Mr. A. C. Stevens in the *Quarterly Journal of Economics*, II: 37-63. See also Emery, "Speculation on the Stock and Produce Exchanges of the United States," (1896), Chapter III.

is conditioned on the delivery of the goods in the spring and at a certain stated price. Whether or not the manufacturer can accept the order will depend upon his ability to purchase the raw cotton at or below a certain price. Existing prices of cotton will enable him to contract to fill the order, but he may not be able to purchase at once the entire quantity of cotton of the desired grade, or does not desire to pay insurance and storage charges and lose the interest of his investment. In all probability, therefore, he seeks his broker and makes known his wants. The broker has no hesitation in naming a price for which he will bind himself to deliver the cotton as it is needed. The broker having received the contract, is now responsible for the delivery of the cotton, himself assuming all the risks which the transaction involves. But this broker, unless he be a speculator, will be unwilling to accept the risk of finding months from now the market so low that he can purchase cotton at a price lower than that which the requirements of the manufacturer and the competition of his fellow brokers have caused him to name. His only reason for agreeing to do business on such a small margin lies in the fact that the system of future delivery contracts enables him to distribute this risk among his associates on the Exchange. The broker therefore goes upon the floor of the Exchange and purchases for delivery in the month or months when his contract with the manufacturer binds him to deliver cotton, a like quantity of this staple. Now, while it is true that owing to the choice of delivering any one of a number of different grades of cotton which the rules of the Exchange gives the seller of "futures," the broker can probably not make use of the cotton which he has thus purchased in filling his order from the manufacturer, his purchase

has nevertheless served to protect him from any loss which he might otherwise suffer from an advance in the price of cotton previous to his purchase of it for direct use in the mills. For if a rise in the price of the staple takes place, compelling him to pay more for his "spinning cotton" than he had anticipated, his "contract cotton" has also risen in value, and by disposing of this at the same time that he lays in his stock for the mills, he meets the loss from one transaction by a gain on the other.¹ What he gains by the entire transaction is only legitimate profits, the difference between the price which he named to the manufacturer and the price which his knowledge of the market led him to think would be the prevailing one when he came to make his purchases. The risk, the speculative element in the transaction, was turned over to the body of traders on the floor of the Exchange, and was probably shared in by a score of persons.²

The service which the system of "futures" renders to manufacturers or brokers in enabling them to "hedge" on imports, it also renders to the factors, the country merchants or the planters who consign cotton to market and wish to guard against a loss through a decline of prices while the cotton is in transit. It may also be

¹The gain in some cases may not be a corresponding one. The seller of "futures according to present rules does not have the option of delivering the higher grades. If, therefore, the "spinning cotton" which he is to purchase be of higher grades, an advance in prices will not be entirely recompensed by the advance in the grades which he can deliver. This has led to a demand by some of the manufacturers and brokers that the rules of the Exchange be so modified as to allow the delivery of the higher grades. See Report of Senate Committee, I: 445.

² That this is not merely a theoretical advantage can be seen by reading the letters of manufacturers of cotton goods to the Senate Committee on Agriculture and Forestry, Report of Senate Committee, I: 439-452.

made use of by the planter who desires to hold his cotton without paying storage and insurance, or he may even take advantage of the system to sell his cotton crop before it is raised, if he expects prices to decline after harvest.

The transactions in "futures" thus furnish planters and merchants a continuously open market for their cotton, with the prices as nearly adjusted to the future demand and supply of that article as the judgment of the best informed class of traders is able to fix it. It is not a sufficient criticism of this system to say that these estimates are often erroneous. In estimating anything of so variable a nature as the probable demand for cotton goods, or the probable supply of cotton, anything like accuracy is impossible. The system should be judged by comparison with that which it has replaced, and not alone by the imperfections which are inseparably connected with it. The system of "futures," it will be seen, goes hand in hand with the new methods of marketing. Without this means of protecting shipments, the manufacturer would not take the risk of importing cotton from the interior, nor could the planter or the merchant of small means afford to consign cotton to market on his own responsibility.

But not the least of the services which the system of future delivery contracts has rendered to the cotton trade, is the greater steadiness in prices which it has introduced. For long periods the fluctuations are perhaps as marked as they were before the sale of "futures" began, for these variations depend upon actual changes in the demand or supply of cotton. But the changes appear less suddenly, and with a less degree of intensity. Thanks to the telegraph and cable, the effect of such circumstances as an attack upon the cotton plant by the

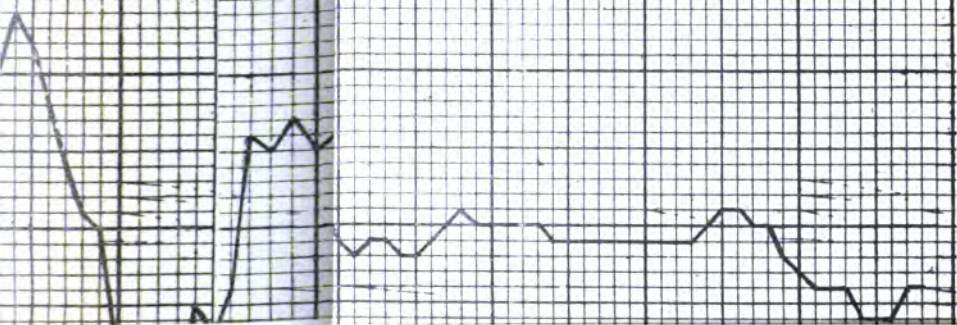
boll worm or cotton worm, or a strike among the spinners at Manchester or Fall River, is foreseen on the cotton market weeks and months before it is felt by the consumer or producer, and a change in the prices of cotton for future months comes about gradually. Spinners and planters, seeing the course that prices are taking, gradually make a change in their own plans, and this tends to restore an equilibrium. When speculation was entirely in "spot cotton," the plans of the spinner or merchant might be entirely upset by the arrival of a ship bringing news from Liverpool or New Orleans, and the "bottom might drop entirely out of the market," or prices might go up like a rocket. To show this greater steadiness of the cotton market since the introduction of the future delivery system, based on modern methods of communication, I have prepared the accompanying chart. The irregular line in the upper part of the chart represents the weekly fluctuations in prices for middling uplands during the five years beginning Sept. 1, 1855, and ending August 31, 1860.¹ By a reference to Appendix I (chart), it will be seen that these years presented less fluctuations than any five years between 1816 and the Civil War. The reports of the *New Orleans Price Current*² for these years also tell us that they were particularly free from speculative influences. The unbroken line in the lower half of the chart represents the course of prices for "spot cotton" (middling uplands), during the commercial years of 1890-94,³ while the broken line shows the course of "futures" for the same years.¹ These are the years during which the

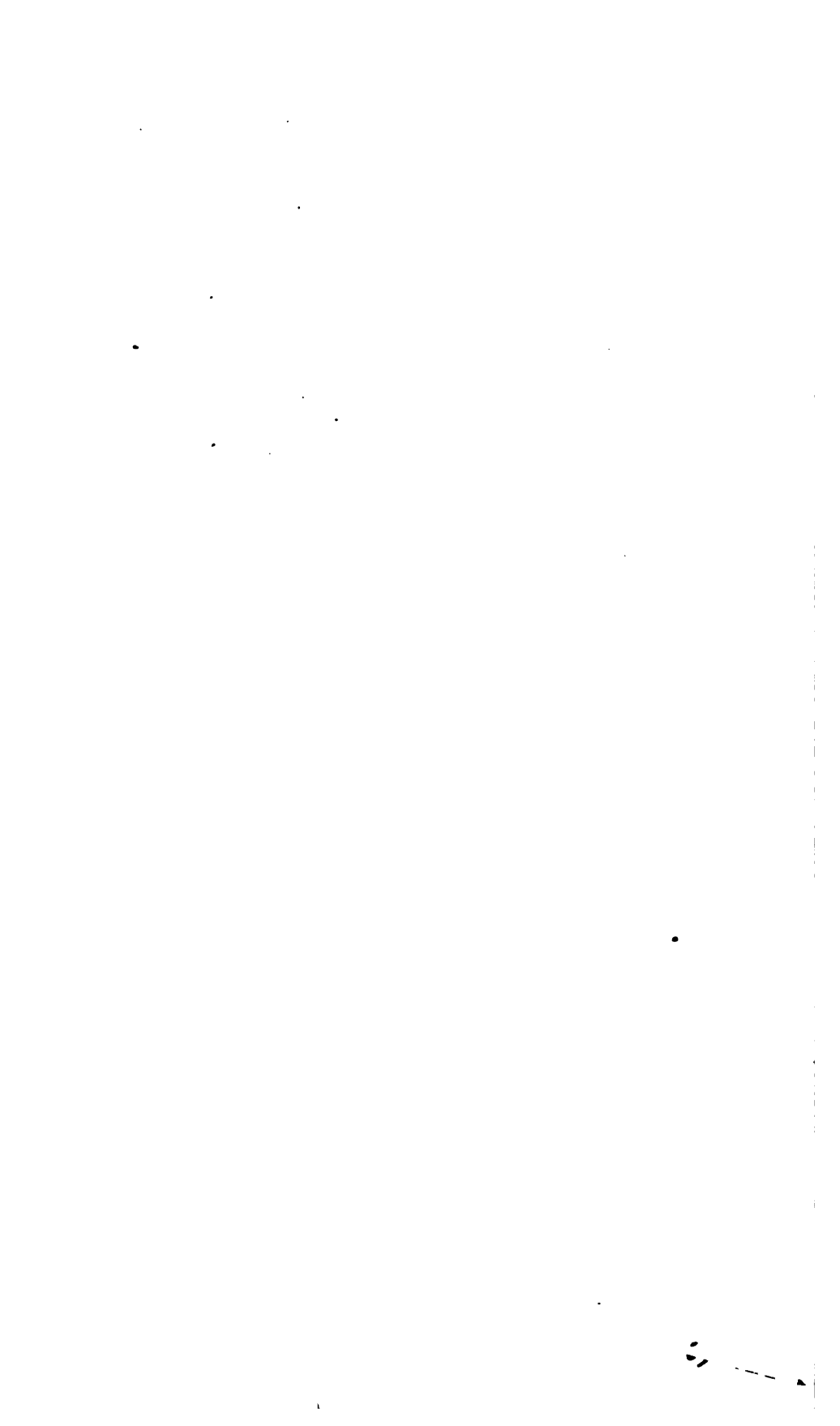
¹ Prices given in Donnell's "History of Cotton."

² Donnell's "History of Cotton," 446, 458, 470, 482, 495.

³ Owing to a change in classification, middling uplands do not represent the same grade that they did for 1856-60. This, however, does not in any way affect the value of the chart, the purpose of which is to offer a comparison, not of prices, but of fluctuations.

Showing
in Price
1860 and 18





largest transactions in "futures" have been made, also years of attempted anti-option legislation which its advocates claim has become necessary because of the disturbance caused to prices by the speculation in "futures" during recent years.

The services of the market for "futures" to the cotton trade may be summed up as follows:²

1. It has introduced greater stability of prices, spreading the fluctuations due to sudden changes in the actual or probable demand and supply over a longer period than under the old method of buying and selling, when prices were constantly subject to sudden disturbances.

2. It furnishes the mechanism for moving the crop with but little risk from a fall or rise of prices.

3. It maintains an open market for both spinner and planter, enabling the former to enter into large contracts for goods and yet avoid the necessity of carrying large stocks of cotton with the attending costs of storage, insurance and loss of interest, and enabling the latter to select his own time for selling, with comparatively little risk of loss involved.

The advantages of the new method of buying and selling have not been appreciated by the great majority of the people, while the evils which are, without doubt, connected with it from the fact that it has greatly increased the number of speculative transactions by those who are in no position to assume the risk which such dealings involve,³ have often been overlooked.

¹ The prices of both "spots" and "futures" were obtained from the weekly reports of the New York Cotton Exchange.

² Compare Mr. A. C. Stevens' article on "The Utility of Speculation," *Political Science Quarterly*, VII : 419.

³ See an article by H. C. Emery on "Legislation against Futures," in *Political Science Quarterly*, X : 85. Also the same author's recent work, "Speculation on the Stock and Produce Exchanges of the United States," 171-191. Hadley, "Economics," Chapter IV.

The leading charge made against the system is that it depresses the price of farm products "by the offering upon the exchanges of illimitable quantities of fiat or fictitious products by those who do not own and have not acquired the right to the future possession of the articles which they pretend to offer and sell."¹ The ordinary laws of demand and supply as a regulator of prices, say the authors of this charge, have been destroyed by the practice of "short selling," and in place thereof the "market wreckers" have introduced the law of supply alone as the governing factor in determining prices. For if the price is not low enough to suit the "bear operator," he has only to hammer them down until they reach the desired figure, and then buy in enough to cover his contracts.

But if we ask the authors of this charge what it is that prevents the price reaching zero, as our elementary lessons in the theory of prices have taught us to expect in cases where there is an "illimitable supply" of an article, and as it is certainly in the interests of the "bear operators" to depress prices as much as possible; or if we

¹ House Reports, First Session, 52d Congress, No. 269, p. 1. Report of Senate Committee on Agriculture and Forestry, Third Session, 53d Congress, No. 986, Part I: viii-xx, *et passim*, Mr. John T. Roddey in the *Columbia State*, Oct. 23 and 25, 1894. Charles W. Smith, "Original Theories Upon and Remedies for Depressions in Trade, Land, Agriculture and Silver," London, 1893, pp. 36-40. *Ibid*, "Commercial Gambling," London, 1893.

Not all who oppose the future delivery system do so on the above grounds. So good an authority as the *Banker's Magazine*, (Vol. XVII. Third Series, page 70), claims that "the system [of 'future' sales] is nothing more nor less than an adroit method practiced by comparatively a very few persons of taxing the whole community, as there cannot be a doubt that these paper contracts sustained during the whole year have the effect of maintaining [cotton] prices far above their natural level." (Italics mine). This opinion is shared by some manufacturers. See Report of Senate Committee, I: 448,450. The system of "futures" has also been opposed by many factors, whose business has been injured by interior buying, itself largely dependent on the future delivery business.

venture to suggest that the demand side of the market has not ceased to be operative; that the "bull operators" have met this "illimitable supply" with an illimitable demand and have prevented prices falling below what is expected to be their normal level, we are met by the assertion that while the demand may still be effectual enough to prevent prices from reaching the zero mark, yet the 'long' is a far less potent factor in advancing prices than is the 'short' in depressing them,"¹ because "one man may and does put the prices down, while it requires the concurrent action of at least two persons to advance the price."²

"It is not necessary," say the anti-optionists, "that there be either a sale or a purchase to determine the price, prices being as often determined by an offer where there is no sale, as by those where there are."³ But, may we not ask, what prevents the offer from being accepted as soon as it is made at a price below that which the Exchange reports indicate is likely to prevail in the month for which the offer to sell is made? And the only rational answer to this question is that this offer will be accepted under the circumstances named. For there are as many persons on the floor of the Exchange anxious to profit by a rise of prices, as there are those who desire to see a decline of the market. Let the market fall but a few "points" below the level which the reports of the weather bureau, the crop correspondents and the cotton statisticians indicate as normal, and the late "bears" will become frantic "bulls" in their haste to "cover."⁴

¹ Speech of Senator Washburn, *Congressional Record*, XXIII: Part 6, page 5985.

² *Ibid.*

³ *Ibid.*

⁴ For a statement of the influence of the short-seller in preventing wide fluctuations in prices, see Emery, "Speculation on the Stock and Produce Exchanges of the United States," 121.

There is no doubt but that a broker who has gained a reputation as a shrewd buyer and seller may, and sometimes does, by bold offers to sell scare the timid "bulls" into refraining from purchasing, but his power lies in the very fact that his previous estimates of the "future" market have proven more correct than Exchange reports, or than the estimates of the buyers opposed to him. Still the power of such a man who seeks to manipulate prices is limited to a very narrow range. As soon as cotton goes down a few "points," buyers will rush in and send it up again.

But the favorite argument of the anti-optionists is that these sales of "futures" "do not constitute actual commerce, since they are dealings in which no actual transfer of property is made."¹ The seller sells not only what he has not got, but what he "does not now or ever expect to possess, and which the buyer does not expect nor intend to receive and pay for."² These "fictitious transactions" are so interwoven with legitimate commerce, the trade in real cotton, that the prices of "spot cotton" are completely determined by the prices made by speculators in "futures," the sale of which is often eight or ten times as great as the entire crop raised. Now, as the speculators on the cotton exchanges are only "hungry cormorants," whose very *raison d'être* is to prey upon "the plunder of the farmer,"³ "bulls" and "bears" give over their ancient feud to make a joint attack upon their common enemy, the farmer. Prices for the future months, it is agreed, shall be put down far below that which they are likely to attain if left to natural law. The reports of these prices fixed by the

¹ Report of Senate Committee, I: xii.

² Senator Washburn in *Congressional Record*, XXIII: Part 6, 5986.

³ Report of Senate Committee, I: xx.

exchanges, say these writers, are circulated among the farmers, who, terrified by the prospect afforded, hurry their crops to market, but as prices for "spot cotton" follow closely the prices of "futures," the farmers must accept the prices which the manipulator at New Orleans or New York has "manufactured" for them.

In attempting to ascertain whether this pessimistic theory of modern commerce be true or not, let us first examine the statement that the buyer does not intend to receive nor the seller to deliver the commodity sold, and see how far it applies to transactions on the cotton exchanges. Rule 4 of the By-laws and Rules of the New York Cotton Exchange¹ says: "All contracts for the future delivery of cotton shall be binding upon members, and of full force and effect until the quantity and qualities of cotton specified in such contract shall have been delivered, and the price specified in said contract shall have been paid. Nor shall any contract be entered into with any stipulation or understanding between the parties, at the time of making such contracts, that the terms of such contract, as specified in paragraph 73 of the by-laws are not to be fulfilled, and the cotton delivered and received in accordance with such section." That these rules are enforced, no one who is familiar with the methods of the Exchange can doubt. The severest penalties are imposed for a violation of the rules by any member of the Exchange.

It is the "ring clearance" which seems to have been in the mind of the anti-optionists² when they made the assertion that it was not the intention of the parties entering into a contract to deliver or receive the cotton therein designated. But, as we have shown, the "ring

¹ Page 105.

² Report of Senate Committee, I: IX.

clearance" is only a simple method of settling contracts when the parties thereto are all buyers and sellers, and the delivery of the cotton which would ultimately come back to the original seller would be a useless expenditure of time and energy. The forming of a "ring" is only possible when the price is "within 25-100 cents of the market price for like deliveries at the time,"¹ and when all the parties interested agree to this method of settlement. If either party were to lose by this method of settlement, the "ring" would never be formed, but each party would demand his cotton in the form of actual delivery. No one can know at the time he sells cotton for future delivery whether his contract is to be "rung" out or settled by actual delivery, although the settlement of the majority of the contracts by the "ringing out" method makes the presumption in its favor. The chief explanation for this mode of settlement being the favorite one, seems to be that a large number, perhaps a majority of the "futures" sold, are for the purpose of "hedging" actual transactions, the *modus operandi* of which we have already described. Owing to the impracticability of using the cotton sold on the future market as "spinning cotton," the manufacturer or his broker who uses "futures" to protect himself, must buy back the "futures" which he has sold, or sell again the "futures" which he has bought.

The rule of the cotton exchanges which gives the seller the option of delivering any one of about thirty grades or half grades of cotton on future delivery contracts which are based on "middling," has also been the object of attack by the anti-optionists, who claim that it is a rule formulated in the interest of speculators and designed to prevent those persons who desire

¹ Rules of New York Cotton Exchange, 105.

to purchase cotton for actual use from using the future market for this purpose.¹ That manufacturers and factors do use the "future" market in spite of this rule is shown by the testimony transmitted by the committee urging this objection. The rule giving an option to the seller as to certain grades of cotton to be delivered by him is a necessary one, not only to the seller who otherwise might have some difficulty in securing the exact grade of cotton called for in the contract, but also because of the facility given to settlement which the rule affords. With the contracts specifying exactly the grade to be delivered, and fifty different contracts specifying fifty different grades, there would be little chance of employing the simple mode of settlement, "cancelling the contract," or "the ring clearance." Nor is there anything to be gained by such a change in the mode of settlement which is not already secured under the present system. If, on the other hand, the contracts should call for the delivery of "middling" only, there might not be enough of what is technically known as "middling" to supply the wants of those who demand delivery. And the existence of such a rule could not but injure the sale of the other grades. The lack of the present system seems to be not in the fact that it includes so many grades, but that it does not permit of the delivery of the higher grades, and thus it tends to exclude the manufacturers who use only the higher grades from the use of the "future" market.²

Another point relied upon by those who oppose the system of dealing in "futures" on the cotton market,

¹ Report of Senate Committee, I: VIII-IX.

² It has been claimed by some well acquainted with the cotton trade that the discriminations made by the future delivery contracts in favor of the lower grades, enable these grades often to find a market where they would otherwise be sold with difficulty.

is that the prices of "spot cotton" follow closely those of "futures," and suffer from the same fluctuations which result from speculation in the latter.¹ We may, I think, accept this statement of the case without endangering for the moment the position which we have assumed. We may acknowledge that prices of "spot cotton" are largely governed by the prices which prevail on the "future market" for some month yet to come, and may even, in the words of the anti-optionists themselves, acknowledge that "the price for that month has been fixed as far as a future event can be fixed by human agency, by actual transactions taking place among men, the best posted of all men in the conditions that regulate prices."² In any case, the price of commodities is regulated not alone by the existing demand and supply, but by the anticipated demand and supply as well, and the system of "futures" has arisen from the very fact that the anticipated demand and supply can be quite accurately foreseen. Is it better to act upon that knowledge at once and have "the best posted of all men in the conditions that regulate prices" state at once the prices which are likely to prevail, and offer to buy and sell on that basis, thus enabling producer and consumer to adjust their business in accordance with the probable conditions? Or, is it better to leave the knowledge gained by modern methods of communication unused, and wait until the expected change makes itself felt upon the market? One answer to these questions can be found in the chart already presented (page 312). The answer is the more apt from the fact that the years treated in the upper portion of the chart are constantly referred to by the anti-optionists as the "golden era" of high prices, steady markets and absence of "bulls" and "bears."

¹ Report of Senate Committee, I : xiv-xv.

² *Ibid.*, xv.

The opponents of the future delivery system themselves acknowledge that the introduction of dealings in futures has had the effect of taking speculation out of the "spot" market.

There is another serious charge against the sale of "futures" that has been brought forward by those persons who favor legislation against "futures." The insurance which the system affords to the exporter or importer of cotton, we are told "is mere gambling as to the future price of the commodity."¹ And it has also been claimed that these dealings "are in law, pure gambling on the future price of cotton."² It can scarcely have been by accident or ignorance on the part of the members of the Senate Committee on Agriculture and Forestry, of the fifty-third Congress, that led them, in seeking evidence on the legality of these transactions, to overlook the decisions of the United States Supreme Court on the question of the legality of these contracts. That tribunal has held (*Irwin vs. Williar*, 110 U. S., 499, 507, 508; 4 Sup. Ct. Rep. 160) that, "A person may make a contract for the sale of personal property for future delivery which he has not got. Merchants and traders frequently do this. A contract for the sale of personal property which the vender does not own or possess, but expects to obtain by purchase or otherwise, is binding if an actual transaction of property is contemplated." The same tribunal has also held (*Bibb vs. Allen et al.*, 149 U. S., 481; 13 Sup. Ct. Rep. 269) that "sales made subject to the rules and regulations of the New York Cotton Exchange" are not "wagering transactions," and are therefore not void.³

¹ Report of Senate Committee, I: xviii.

² *Ibid.*, ix.

³ There is not space in this article to consider all the arguments that

It is not to be denied that the system of buying and selling "futures" does offer great facilities for those who wish merely to speculate on the price of a commodity, and the system offers opportunities, which have often been embraced, for persons of limited means to indulge in "market gambling." Especially is this true in the case of cotton. Persons who would not have the money to buy "spot cotton" to hold for a rise, are able to put up the one or two hundred dollars required for "margins." Like a lottery, therefore, it serves to draw in all the earnings of a certain class who do not possess the knowledge of the market conditions necessary to the operators on the Exchange, and too often leads them to invest not only their own capital, but the property of others confided to their care. How much has been thus spent by the cotton growers of the South, no one knows. Opinions differ as to the extent of the practice among planters, but it is known that every few years a speculative mania seizes hold of the people of this section, leading them to turn "bulls," and to send the price of cotton up far beyond what the actual and probable future condition of the market warrants.

have been brought forward by those opposed to the modern trade in "futures," especially in the Report of the Senate Committee so often referred to in the preceding pages. The report of this committee, not only on the subject of "futures," but on the whole treatment of the causes which have led to the recent depression of cotton prices, shows a wonderful manipulation of the testimony taken by them, to advance the pre-conceived or pet theories of the members of the committee. On the subject of "futures," there is scarcely an argument presented in the report of the committee which is not fully and adequately answered in the published testimony transmitted with the report. A full treatment of the subject of contracts for future delivery and their relation to commerce from the standpoint of the defenders of the system, is to be found in the articles of Mr. A. C. Stevens and Prof. H. C. Emery, already referred to. For the opposite view, see in addition to the authorities referred to on page 314, W. E. Bear, "Market Gambling," in *Contemporary Review*, June, 1894.

All well meaning persons will willingly support an effort to prevent by legislative means, or otherwise, the gambling speculations which are without doubt a feature of the modern produce and stock exchanges.¹ But to attempt to do this by forbidding "contracts for the sale and future delivery [of commodities] by a party who is not the owner thereof, and has not acquired the right from the owner to the future possession of the article contracted to be sold and delivered,"² would be striking a blow at the modern mechanism of commerce that would recoil with particular severity on the producers of the South, dependent, as many of them are, on the sale of their crops months before the harvesting of them.³

¹ For the plan devised in Prussia to check these speculations, see H. C. Emery, "Legislation Against Futures," *Political Science Quarterly*, X: 85. *Idem*, "Speculation on the Stock and Produce Exchanges of the United States," Chapter VI.

² House Reports, First Session, 52d Congress, Vol. 4, No. 969, page 3.

³ The framers of the Hatch bill sought to avoid this by providing that the act should not apply to "contracts made by any farmer or planter for the future delivery of the products of his land, either grown or growing." But as the merchants or brokers would be estopped from contracting with the spinner to furnish him cotton which they had not already secured, the market would be narrowly limited with a heightening of the risk which the broker would run, and the consequent lower price which he could afford to pay to make up for this risk.

CHAPTER XI.

THE COTTON TRADE OF THE UNITED STATES FROM 1866 TO 1897.

Released from the shackles which had been put upon it by the Civil War, and freed from its dependence on slave production, the American cotton trade began rapidly to recover the ground lost by it during the four years' struggle, and soon attained in the commerce of this country and that of the world an importance even greater than that possessed by it in 1860. The early estimates of the amount of cotton remaining in the South at the close of the war were entirely too large. At the end of August, 1865, the *Commercial and Financial Chronicle*, an authority in high favor among cotton men, supposed that 3,100,000 bales was perhaps not too large an estimate of the cotton which merchants and traders were inclined to believe had been hidden away by the planters, safe from capture and confiscation by the northern troops.¹ Less than three months later it had reduced this estimate to 1,500,000 bales.² In view of the disorganized condition of the South and the unwillingness of the negroes to work, the *Chronicle* estimated the crop of 1865 at only 300,000 bales. About the first of June of the succeeding year, the *Chronicle* raised its estimates. "Those who estimated the supply of cotton in the South at about two and a half million bales," it said, "seem likely to witness the fulfillment of their predictions."³ Up to that time, 2,300,000 bales had already been received at the ports. This total must

¹ *The Chronicle*, I: 259.

² *Ibid.*, 611.

³ *Ibid.*, II: 675.

have included the greater part of the crop raised in 1865. By September 1, 1866, the receipts at the ports aggregated 2,666,222 bales.¹ According to the rule observed by cotton statisticians of estimating as the crop for the year all brought into sight since the close of the last commercial year, 2,269,316 bales of the above represent the commercial crop of 1865-66. But it is certain that a large part, probably the greater portion of this commercial crop, consisted of the cotton which remained undestroyed in the South during the war. Watkins² thinks that the actual crop of 1865 was not in excess of 500,000 bales, and although this estimate may be too small, it leaves only a little over two million bales as the cotton held in the South during the war. The belief in the existence of large quantities of pent-up cotton which were likely to be brought forward at any time, caused a more rapid decline of prices on the return of peace than the actual state of things warranted. In early March of 1865 the price of cotton was 90 cents in New York, but two weeks later, after the Federal successes around Richmond had shown that the conflict was nearly over, the price had fallen to 55 cents. Again, after the announcement that the President would remove the restrictions on the sale and transfer of the staple, the price further declined to 40 cents.³ But the expected arrivals of pent-up cotton were much smaller than had been anticipated, although during the summer of 1865 the movement to the ports was quite a brisk one. The stocks at New Orleans increased from 17,250 bales in the middle of June, to 88,000 bales in the middle of August.⁴

¹ *The Chronicle*, III : 453.

² "Production and Price of Cotton for One Hundred Years," 14.

³ *The Chronicle*, I : 358.

⁴ *Ibid.*, 259.

There was, of course, much uncertainty as to what would be the future of cotton cultivation in this country. To those who believed that the culture of the staple was dependent upon the existence of slavery, the end of "King Cotton's" days seemed to be fast approaching. Even those who trusted in the ultimate triumph of free labor in the cotton fields, were forced to admit that the prospect for a few years looked anything but flattering. There was plenty of labor, but this labor had just attained its freedom and was inclined to enjoy it in idleness for a while. Besides, there was little capital in the South to hire labor, or to purchase seed and tools. And then there were India, Egypt and Brazil in possession of the British and Continental markets to be displaced, if possible, by the American staple. This latter task proved a not difficult one. European spinners were discouraged by the attempts to spin the dirty short stapled cotton from the East, and although they were obliged to continue its use in large quantities for a time, they were quick in giving the American staple the preference. The importation of Indian cotton by Great Britain, which reached its high water mark in 1866 with 1,866,000 bales, met with an almost steady decrease after that year until 1882, when, influenced by the reports of a short American crop, India was induced once more to send over a million bales to Liverpool. Egypt alone of the competitors to the United States which the Civil War had raised up or stimulated, seemed able to maintain the favor of the European spinners which had been shown them in the absence of the American cotton. For the five years immediately following the war, the demand for American cotton was sufficient to keep it from sinking much below 25 cents on the New York market and 10 pence in Liverpool.

The reorganization of the labor force and the expansion of cotton culture in the South was a more formidable undertaking than the securing of a market for the cotton when it was raised. The crop of the year 1865 was much larger than had been anticipated,¹ but the increase in the growth of cotton was very slow until 1870, and not until fifteen years after the war was over was there a crop produced equal to the remarkable one of 1860. The dull trade during 1867 and 1868 led Congress to repeal the internal revenue tax on raw cotton which the necessities of the war had led it to impose.² In 1869 prospects grew brighter, but in 1870 the Franco-Prussian war caused another disorganization of the foreign trade of the United States, especially that with the Continent.³

By 1871, the cotton trade of the world may be said to have again reached its normal state. The American crop was in excess of 4,300,000 bales, and the consumption of the European and American mills had attained up to that time its maximum. American had not yet gained the superiority over the cotton from other countries in the same degree as in the decade preceding 1860, but British importations from the United States were on the increase, while those from other countries had become stationary, or had almost ceased. Prices were still above *ante-bellum* figures, but American "middling" had reached 17 cents in New York on the down grade, and 8½ pence in Liverpool.

The cotton trade does not seem to have been greatly

¹ *The Chronicle*, I: 611.

² This tax was imposed in July, 1862, and was then one-half cent per pound. In June, 1864, it was raised to two cents; in March, 1865, to five cents; was reduced in July, 1866, to three cents, and entirely removed on February 3, 1868.

³ Watkins, "Production and Price of Cotton," 15.

affected by the panic of 1873. The production of the staple was in excess of that of the preceding year, though not so large as during 1871. The consumption in Europe and at home appears to have been normal, and prices were in accordance with a natural state of affairs. Nor did the depression suffered by the English cotton industry during the years 1878 and 1879 seriously affect the cotton trade of this country. Prices were slightly less in 1879, but the production, exportation and consumption of the staple presented their usual increase.

A reference to the chart showing the average annual prices of American cotton in New York and Liverpool (Appendix I) will show that British prices have usually been at a higher level than have American. This is only what we should expect, from the fact that British prices must include the freight to Liverpool. During the Civil War, the more urgent demand of the northern spinners is doubtless sufficient to explain the higher prices which prevailed on this side the Atlantic, but this higher level was maintained after the close of the war by the expanded character of the American currency. But about the time resumption of specie payments was decided upon in 1875, British prices again overtopped the American, and have continued at a higher level ever since.

The decade beginning with 1880 was one very favorable to the cotton trade and industry of the United States. The crop harvested this year was the largest yet grown, and the consumption of the American mills, which, according to the Tenth Census numbered 756, with 10,678,516 spindles, was in excess of one and three-quarter millions of bales. The demand for cotton was strong enough to even cause a rise in prices.

In 1881 a Cotton Exposition was held at Atlanta.

The visitors to this were convinced that "an industrial revolution had actually been effected in the South,"¹ and that the raising of cotton was not only possible without slave labor, but was carried on with more profit and better results under the new regime. One gentleman present claimed to have produced with free labor cotton at three cents a pound.²

Some attention must be given to the year 1882 on account of the speculative character that the cotton trade then assumed. This year is a favorite illustration with those who claim that speculation in "futures" is responsible for the uncertainty of the market, and that "short selling" is the cause of the depression of prices.³ The supporters of this theory hold that the short crop of this year should have met with an advance in prices; that this view was taken by the planters, "whose tendency is always to hope for and believe in higher prices," and who, expecting to profit by the advance in value, invested largely in "futures." The "bears" having thus enticed the "lambs" into their dens, suddenly began "selling short," until "the bottom fell out of the market," the former buyers became panic stricken and hastened to "unload" their purchases at prices even lower than those of the big crop year, 1881, while the "bears, having covered their shorts" at the lowered prices, desisted from their operations and the market under normal conditions again advanced.

In studying the conditions of this year, we must first look at the crops of the preceding years. After 1876, the production of the United States had increased at a rapid rate, and the crop marketed in 1880-81 was the

¹ *The Chronicle*, XXXIV : 3.

² *Ibid.*

³ Testimony before House Committee on Agriculture, House Reports, 52d Congress, First Session ; No. 969, p. 1245.

largest that had ever been attained, being 6,589,000 bales. Although the consumption of Europe was larger than during the preceding year, October 1, 1881, found stocks at the ports twice as large as for the previous year. Ellison's "Annual Report" stated that consumption was likely to increase at the same rate during the following year, that the crop of America would probably be "smaller than that of last season," and that arrivals from other countries would not be much greater than they had been.¹ In view of this conservative statement, the *Commercial and Financial Chronicle* felt warranted in saying that "there is going to be no dearth of cotton this year," and that "it is wise to let Europe have all she wants at present prices."² Throughout the South, however, the *Chronicle's* and Ellison's view of the situation was not accepted, but the estimate of the United States Agricultural Bureau, which made the crop only about 4,600,000 bales, was relied upon. Many planters, therefore, invested largely in "futures." By the middle of February the sales of "futures" since September 1, on the New York Cotton Exchange were twenty per cent. in excess of those during the same period of the preceding year, and in New Orleans the sales of "futures" were already in excess of the sales for the entire commercial year 1880-81. Commenting on these conditions, the *Chronicle* said (Feb. 18, 1892): "Are not such figures wonderfully suggestive of severe losses and painful experience [Speculation] is a prominent reason why the South does not accumulate wealth faster. It always speculates on a cotton crop, and almost universally on what is called the bull side. Many of the southern people are so wedded to

¹ *The Chronicle*, XXXIII: 547.

² *Ibid.*, 456.

their idea that they dislike the giver of any information which does not help their theory."¹

By February it had become apparent that the estimates of the United States Agricultural Bureau had not only been too low, but that the receipts of cotton by Europe from other countries than the United States would be far in excess of what had been expected, and there came the unavoidable collapse in prices. The United States crop, although a short one, was nearly a million bales in excess of the early estimates. Although Manchester increased her consumption, she took less American cotton than during the preceding year, and made up this deficiency by increased consumption of cotton from India, which had been led by the expectation of higher prices, to send to Liverpool over a million bales, nearly twice as much as during the preceding year. As a result of all this, prices for American fell so low during the latter half of the year that the average for the whole year was less than for the preceding year. The decline in prices was not due, however, to manipulation on the part of the "short seller," but was a natural result of the over-speculation by "long buyers."

In the winter of 1884-85, a Cotton Exposition to commemorate the centennial of the cotton trade of the United States, was held in New Orleans. The infant republic which in 1784 had sent its eight bales of cotton across the seas, was now at times sending nearly five million bales to European spinners, besides consuming two million bales in her own mills. The crops of 1884 and 1885 were short ones, but after these years, until the end of the decade, there was an almost steady increase in production. The consumption of cotton in both Europe and America maintained a corresponding

¹ *The Chronicle*, XXXIV: 188.

increase, and for seven years, beginning with 1883, average prices in New York were between $9\frac{1}{4}$ and 11 1-10 cents, and in Liverpool were between $5\frac{1}{2}$ and $7\frac{1}{2}$ pence for middling uplands.

In 1890-91, there came on the market a crop of 8,650,000 bales, followed the next year by a crop of over nine million bales. Then came two years of moderate production, but the commercial year 1894-95 threw another enormous crop of 9,900,000 bales, or over five billion pounds, on the market. Such a decline of prices resulted that cotton has been selling for less than nine cents ever since the spring of 1891, and during the early part of 1895, touched the extremely low figure of $5\frac{1}{2}$ cents in New York, and $4\frac{7}{8}$ cents in New Orleans. Owing to reduced acreage and to attacks of the boll worms the crop of 1895-96 was a small one, and a considerable advance in prices took place; middling uplands selling on the New York market at an average of 8.16 cents for the commercial year. During the past year prices have once more suffered a decline. The commercial crop of 1896-97 which amounted to 8,757,000 bales was sold at an average price of 7.72 cents per pound in New York and 7.32 cents in New Orleans. But the crop was raised at a very small cost, and despite the low prices "it is safe to estimate that it has netted the producer more than any previous one."¹

Considerable effort has been made by various writers to explain the depression in prices of cotton which has taken place since 1890. The committee appointed by the Senate of the fifty-second Congress to investigate the conditions of American cotton growers and the

¹ Henry G. Hester, *Annual Report of New Orleans Cotton Exchange*, September 1, 1897.

causes for the depression in the prices of the American staple, in their report denied that over-production was the cause of the low prices, or that there had been any over-production in the sense in which that term is usually employed. The proof which the committee brought forward to support these really remarkable statements, was a comparison of the supply of cotton for the mills and the average prices of the year 1860-61, with the supply and prices for the years since 1890. It was found that while the supply for the mills at the close of the commercial year 1861 (August 31), was as great or greater than at the close of the commercial years 1891, 1893 and 1894, yet prices were in 1860-61 forty or fifty per cent. higher than for the later years. "This," says the committee, utterly overthrows the theory of over-production as the cause of the low price, the surplus in America being less than in 1860."¹

The absurdity of this entire argument will be apparent to all who have followed the history of the cotton trade, and who remember the critical condition of the world's cotton industry in 1861. The commercial year ending August 31 of that year extended five months into the period covered by actual hostilities, carried on in the midst of a country producing seventy-five per cent. of the cotton used in the European mills. The prospect of a cutting off of supplies of cotton for years to come was certainly sufficient to prevent a decline in the price of that staple without any regard to the few months' supply which then lay in the mills or in the ports. As we saw in our discussion of this period, the one thing to cause wonder is that prices did not go much higher, as they undoubtedly would have done if the real gravity of the situation had been appreciated.

¹ Report of Senate Committee, I : v.

Having rejected, in spite of the almost unanimous testimony of the witnesses examined, the theory of over-production as the cause of the recent decline in prices of cotton, the committee considers at some length the causes which it finds to be chiefly responsible for the financial depression from which cotton growers have been suffering. These causes the committee asserts are, speculation in "futures," and the demonetization of silver. We have already discussed the reputed influence of the future delivery system on prices.¹ With reference to the influence of the so-called demonetization of silver on prices, we can only say that the investigation of this interesting subject belongs to the student of general prices, and does not fall within the domain of the present work. For whatever influence this circumstance may have exerted on the price of cotton, it has exerted with equal effect on the prices of other commodities, and it is plain that the recent depression in the prices of cotton has been much greater than the fall in the prices of commodities in general.²

The secretary of the Senate sub-committee, Mr. Alfred B. Shepperson, a cotton statistician of prominence, also inclines to the opinion that over-production has not been the cause of the recent low prices, although he does not state what he considers to have been the true cause. "An examination of the number of weeks' supply of cotton in the European markets at the end of each season," says Mr. Shepperson, "does not confirm the opinion

¹ Above, Chapter X.

² For a discussion of the reputed advantages which the silver standard countries, India and Egypt, have over the United States in the production and sale of cotton, see the author's article "The Southern Farmer and the Cotton Question," *Political Science Quarterly*, September, 1897, pp. 470-72.

held by many persons, that of recent years there has been an over-production of cotton. It is evident that the proper way to judge of the supply of any manufactured product is by the number of weeks' supply for the use of the manufacturers in the market at the close of the season, and judged by this standard, the average yearly supply exceeded the demands of the manufacturers to a greater extent from 1843 to 1860 than from 1866 to the present time."¹ But aside from the fact that the existence of a large supply of cotton on hand at the end of a year is more often the result than the cause of low prices, we cannot judge fairly what prices ought to be by comparing the supply at the close of a recent year with the supply at the close of some year previous to the Civil War. The great development in means of communication and transportation, and the rise of the future delivery system, built upon the modern methods of transporting news and goods, have done away with the necessity of carrying the large stocks of cotton customary in the earlier days. One can scarcely conceive at the present time of manufacturers or merchants again carrying such enormous stocks as they did in 1843, when at the end of that year a supply of cotton equal to thirty-four weeks' consumption was gathered in Europe.

The true method of ascertaining whether there has been over-production in recent years, or whether there has been "an increasing demand equalling the increasing supply," as the Senate Committee asserts to have been the case,² is to compare the rate of increase in production and the rate of increase in consumption since

¹ Report of Senate Committee, I: 500.

² *Ibid.*, v.

1890, not only with each other but with corresponding rates for some previous years. To find years proper for comparison we need not go back to *ante-bellum* days. No decade in the history of the American cotton trade has been more favorable to the cotton industry, and more nearly exemplifies the normal condition of the trade, than the decade beginning with the commercial year 1880-81. Watkins says of it: "Throughout this decade prices were maintained with remarkable uniformity, although at times there were complaints of an accumulation of manufactured goods, the supply being in excess of the demand."¹ It is with the increase in production and consumption during this decade, therefore, that we shall compare the increase in production and consumption between 1890 and 1895. With the exception of trifling amounts the entire American crop is consumed in the mills of Europe and the United States. Adding to this the imports into Europe from other countries, we get the total crop so far as it concerns the European and American consumption. Comparing this with the consumption of both countries, and noting the rate of increase of each and the supply left over at the beginning of the new year, we obtain the following facts:²

¹ Watkins, "Production and Prices of Cotton," 17.

² The data for this table are furnished by the *Commercial and Financial Chronicle*, LXI: 403.

Year.	United States Crop.	Supply from Other Countries.	Total Supply for Europe and America.	Total Actual Consumption.	Visible and Invisible Supply at Beginning of Year.	Average Annual Price in Liverpool.
	Bales of 400 lbs.	Bales of 400 lbs.	Bales of 400 lbs.	Bales of 400 lbs.	Bales of 400 lbs.	Pence.
1880-81 . . .	7,519,000	1,837,000	9,356,000	8,646,000	1,548,000	6.48
1881-82 . . .	6,073,000	2,510,000	8,583,000	9,035,000	2,168,000	6.70
1882-83 . . .	8,058,000	2,350,000	10,480,000	9,499,000	1,616,000	5.90
1883-84 . . .	6,485,000	2,434,000	8,919,000	9,290,000	2,405,000	6.03
1884-85 . . .	6,420,000	2,007,000	8,427,000	8,597,000	1,939,000	5.76
1885-86 . . .	7,480,000	2,100,000	9,580,000	9,371,000	1,679,000	5.14
1886-87 . . .	7,450,000	2,478,000	9,928,000	9,757,000	1,800,000	5.42
1887-88 . . .	8,000,000	2,100,000	10,100,000	10,167,000	1,841,000	5.51
1888-89 . . .	8,079,000	2,350,000	10,429,000	10,524,000	1,614,000	5.73
1889-90 . . .	8,525,000	2,580,000	11,105,000	11,055,000	1,499,000	5.97
Average . .	7,408,000	2,274,000	9,690,700	9,594,000	1,810,900	5.86
1890-91 . . .	10,170,000	2,488,000	12,658,000	11,726,000	1,434,000	4.94
1891-92 . . .	10,800,000	2,390,000	13,190,000	11,721,000	2,266,000	4.18
1892-93 . . .	8,044,000	2,690,000	10,734,000	11,348,000	3,610,000	4.57
1893-94 . . .	8,920,000	2,719,000	11,639,000	11,692,000	2,885,000	4.23
1894-95 . . .	12,050,000	2,000,000	14,050,000	12,579,000	2,707,000	3.41
1895-96 . . .	.....	.....	.....	.....	3,953,000	.....
Average . .	9,995,800	2,457,400	12,454,200	11,813,200	2,809,000	4.26

From the above table it will be seen that there is little foundation for the statement that there has been within the past few years an increase in the demand equal to the increase in the supply. Even for the decade ending with 1890, the increase in consumption did not quite keep pace with the increase in production. The average consumption for the decade was nearly one hundred thousand bales less than was the average supply for the American and European mills.

Between 1890 and 1895, however, the production far out-stripped consumption. The total supply for the European and American mills in 1894-95 exceeded that of 1890-91 by nearly eleven per cent., while the consumption of 1894-95 showed an excess over that of 1890-91 of only 7.28 per cent. The average consumption for the five years was 661,000 bales less than the average "total supply."

The American planter cannot shift the entire responsibility for this increase in production on to the shoulders of the cotton growers of other lands, for it will be seen that between 1890 and 1895 the average annual supply for Europe from other countries than the United States was less than 200,000 bales in excess of the average supply between 1880 and 1890. In the meantime stocks accumulated until the total visible and invisible supply at the beginning of the commercial year 1895-96 amounted to nearly four million bales of 400 pounds each.

To a slight extent a decline in the rate of consumption is a cause for this failure of production and consumption to keep pace with each other since 1890. The consumption for the year 1892-93 was 3.27 per cent. less than that of the preceding year, which was itself slightly less than that of 1890-91. The commercial and financial depression which has attacked industry since 1890 has doubtless had a great effect in checking the power of consumption of the people for cotton goods. Under normal conditions we should have expected the reduction of prices to have caused a more rapid increase in the rate of consumption, but the business depression was felt in New England so keenly during 1893 and 1894 that Ellison & Co., in their annual report for 1894, tell us that America was obliged to find a market in Liverpool for from 300,000 to 400,000 bales of cotton which would otherwise have been consumed at home.

As a more particular and definite cause of a decrease in the rate of consumption, we have the strike of the cotton mill operatives of Lancashire. The strike lasted from Nov. 7, 1892, to March 26, 1893, and so affected the cotton industry that the consumption of Great Britain was 300,000 bales less for 1892-93 than for 1891-92.¹

¹ *Commercial and Financial Chronicle*, LVII: 403.

This was a sudden blow to the cotton trade, for all the indications had pointed to a greatly increased consumption. The loss from this cause alone almost suffices to explain the falling off in the consumption during the years 1891-93.

But after all due allowance is made for the failure in the expected rate of consumption, it is in a too rapid increase in the rate of production that the chief blame lies for the recent decline in the price of cotton¹ Under healthy business conditions it is doubtful if the world's markets are ready to take crops of over nine million bales from the United States, in addition to the average supply from other quarters, at prices which will afford the producer a profit. It is almost universally conceded that the only permanent relief from low prices is to be found in a reduction of the acreage. And the difficulties which lie in the way of this plan we have already considered.²

In reviewing the history of the cotton trade since the Civil War, perhaps the first thing which strikes our attention, after the increase in production of the staple in the United States, is the change in the routes for marketing the cotton. One of the characteristic features of the history of the cotton trade before the Civil War, was the repeated and always unsuccessful attempts on the part of the British manufacturers to relieve themselves from dependence on one source of supply for their cotton. The history of the cotton trade since the war has shown a more successful effort on the part of the cotton growers to emancipate themselves from the control of a single market for their product.

¹ Compare an article by S. I. Hubbard, Jr., in the *Bankers' Magazine* for January, 1895.

² See Book I, Chapters V, VI and VII.

In 1860 Great Britain took 55 per cent. of the American crop, and consumed in her mills 49.8 per cent. of the entire amount consumed by the mills of all Europe and America. In 1895, only 33 per cent. of the American crop found a market in Great Britain, and only about 34 per cent. of the entire amount consumed in the United States and Europe was spun in the British mills. This has not been due to an absolute decrease in the consumption of British mills. On the contrary, the consumption of Great Britain is vastly in excess of that of 1860, and America furnishes a larger percentage of this cotton than she did previous to the war. But while the consumption of cotton by British mills has increased at a flattering rate, the market for cotton has been strengthened by a still more rapid increase in the consumption of other countries. Thus the Continental countries which consumed 1,723,000 bales of 400 pounds each in 1860-61, or about 32 per cent. of the total European and American consumption, in 1895 consumed 5,096,000 bales, or over 40 per cent. of the total consumption of Europe and the United States. Previous to 1870, France was the Continental country first in importance as respects cotton manufactures, but an important seat of her industry was to be found in the Rhine provinces, Alsace and Lorraine. When these fell to Germany as a result of the Franco-Prussian War, it gave that country the leadership on the Continent as a cotton manufacturing land. Even France's claim to second place among Continental countries is now disputed by Russia, whose cotton industry has grown at a marvelous rate since 1850. The number of spindles in this country in 1892-93 was five millions, and the cotton consumed 1,035,000 bales, as compared with five and one-half million spindles and 750,000 bales of cotton consumed in

France.¹ Austria, Italy, Spain, Belgium, Switzerland, Sweden, Holland, Portugal and Greece follow in the order named, as regards the importance of their cotton manufactures. All of these countries import cotton from the United States, most of them having the bulk of their consumption composed of American cotton.

Although it is gratifying to be relieved of dependence on one market for the sale of our raw cotton, thus diminishing the probability of disaster to the cotton trade by such circumstances as a war between this country and Great Britain, or a strike among the cotton mill operatives of Lancashire, and while this tendency to seek more markets is in keeping with the commendable policy of Mr. Morton, the late Secretary of Agriculture, there are some dangers to the American cotton trade connected with the changed routes for marketing cotton. The English trade in cotton goods has grown at a rapid rate, but it is plain that without the development of manufactures elsewhere, the increase in English trade and manufacture might have been still more rapid. Especially is this true as regards India. The unsuccessful struggle which India waged with America on the British cotton markets previous to 1870, she has at last turned into success by consuming her own cotton. In 1869 there were in India only about 400,000 spindles, consuming annually about 80,000 bales of cotton.² By 1895 the number of spindles had increased to nearly or quite 4,000,000 (3,650,000 in 1894), and the consumption of cotton to about 1,375,000 bales.³ While this manufacture of her own cotton has led India to relax

¹ Ellison, "Lancashire and Her Competitors," Latham, Alexander & Co.'s Report for 1894, p. 31.

² In addition to 670,000 bales spun by hand.

³ Ellison, "The Cotton Trade of India," Latham, Alexander & Co.'s Annual Report for 1895, 35-6.

her efforts to compete with American cotton on the European markets, it has, by seriously disabling British trade in cotton goods not only in India but likewise in China and Japan, reduced to a certain extent the manufacture of American cotton into goods intended for those markets.

But likewise the shifting of our cotton trade from England to the Continent has brought us into greater competition with cotton from other countries than would likely have been the case if we had met these cottons only in Lancashire. As respects Indian cotton, it is true that this competition is less felt now than it was some years since. The consumption of Surat cotton has almost ceased in England, and has been greatly reduced on the Continent. Still, the use of this cotton is considerable, especially in such countries as Switzerland, Belgium and Austria. The slower speed of the spindles on the Continent enables the operatives to spin this short cotton when its use would be impracticable in England or America, and its cheapness makes its use preferable for the lower grades of yarns.

But the Continental countries consume also considerable quantities of cotton from other lands. Thus the Egyptian cotton is much used in France, Russia and in Alsace and Saxony, while almost one-third of the cotton consumed by the large and rapidly growing Russian manufacture comes from Asiatic countries, Persia, China, and especially from Turkestan and the Trans-Caucasian provinces belonging to Russia.

While, therefore, the expansion of the cotton industry on the Continent has been of the greatest advantage to the American cotton growers, it must be remembered that some of the markets thus furnished must be jeal-

ously guarded, or they may be lost to the producers in other quarters of the globe.

But another rival to Lancashire, of more importance to the American cotton grower than the cotton manufactures of any of the Continental countries, is the home manufacture. The increase in the amount of cotton consumed at home has been much more rapid than in Great Britain or on the Continent. In 1860 less than four hundred million pounds of cotton were consumed by the mills and domestic manufactures of the United States, the percentage of the American crop thus used being about 20 per cent., while America's percentage of the combined consumption of Europe and America was less than 18 per cent. In 1895 over 1,400,000,000 pounds of American cotton were consumed in the United States, or over 28 per cent. of the entire American crop, 25 per cent. of the joint European and American consumption.

The most noticeable feature of the American cotton industry since the Civil War has been the growth of the cotton manufacture near the seat of the supply of raw material. In 1860 there were in the southern states but 217,000 spindles, and only 10,000 bales of cotton were consumed in the mills, although the domestic manufactures consumed much in excess of that amount. Now about one-fifth of the spindles of the country are to be found in the South, and nearly one-third of the entire consumption of cotton takes place there.¹ Whatever may be the relative advantages of the South as a cotton manufacturing district, or the prospect of its outstripping the North, it can only be a matter of congratulation to the whole country that manufactures are springing up in this section, which shall furnish local markets

¹ See R. H. Edmonds, "The Cotton Manufacturing Interests of the South," Latham, Alexander & Co.'s Annual Report, 1895, 45-55.

not only for cotton, but for other products the raising of which has been so long neglected by the southern planter.

The following table is intended to furnish a statistical view of the past and present condition of the world's cotton markets, by giving the consumption of the leading cotton manufacturing countries by decennial years since the advent of American cotton as an article of export.

CONSUMPTION OF COTTON IN THOUSANDS OF BALES OF FOUR HUNDRED POUNDS EACH BY THE LEADING MANUFACTURING COUNTRIES OF THE WORLD FOR THE DECENNIAL YEARS.¹

COUNTRY.	1790	1800	1810	1820	1830	1840	1850	1860	1870	1880	1890	1895
Great Britain	70	125	245	322	619	1147	1470	2709	2686	3431	4141	4264
Cont. Europe	75	100	125	190	344	652	1001	1767	1841	2854	4318	5096
Russia					10	36	119	218	243	550	750	
Sweden					2	4	20	40	40	62	80	
Germany					40	66	115	350	367	715	1170	
Austria					50	85	145	235	240	350	530	
Switzerland					22	45	60	76	98	122	150	
Holland					5	10	12	16	24	50	65	
Belgium					20	40	55	72	88	125	145	
France					170	291	350	565	550	500	650	
Spain					15	35	85	130	125	220	300	
Italy					10	20	40	65	66	160	390	
United States	5	40	50	80	184	340	768	968	1012	1981	2731	3219
North									913	1779	2102	2215
South									99	202	629	1004
India ²								65	98	301	988	1260
China											1485	

The closing pages of Chapter IX and the first pages of the present chapter have made us familiar with the fruitless attempts on the part of other cotton producing countries of the world to displace the cotton from

¹ From Ellison's "Centennial Sketch of the American Cotton Trade," Latham, Alexander & Co.'s Report for 1892, pp. 47 and 50, and from *Commercial and Financial Chronicle*, LXI., 403. Somewhat different statistics are given by von Halle, "Baumwollproduktion und Pflanzungswirtschaft in den Nordamerikanischen Südstaaten," Erster Teil, 181-2.

² Mill Consumption.

the southern states on the European markets by the staple from their own lands. The closing of the southern ports for four years had given the complete control of the European cotton trade into the hands of the cotton producers of Asia, Africa and South America; but the re-opening of the southern ports at the close of the war again flooded the markets with American cotton, and within a decade the position of America as a source of cotton supply for Europe seemed as impregnable as ever. But the other countries having once gained a foothold were loath to surrender their gain, and after a few years' decline they began once more to increase their exportations to Europe. The result has been that while the United States sends a great deal more cotton to Europe than it did in 1860, relatively speaking its exports are less. In 1860 America furnished 83.89 per cent. of the entire amount of cotton imported by Europe, while in 1890-91 only 74.08 per cent. of the cotton imported by Europe came from the United States. It will therefore be necessary to examine, if but briefly, the present status of the cotton trade of America's competitors, and see if there is any reason to believe that the United States will lose the supremacy that it has so long held as a cotton grower for Europe.

Although cotton is grown in every grand division of the earth's surface, and in many portions of each continent, in most countries the amount grown is insignificant. According to an eminent cotton statistician, the production of the various cotton growing countries of the world was in 1889-90 as follows:¹

¹ Ellison, "A Centennial Sketch," 51. Compare chart by Harry Hammond on Production and Consumption of Cotton, 1790-1895, in "The Cotton Plant," Bulletin No. 33, Office of Experiment Stations, Department of Agriculture, opposite page 42. Same chart in von Halle, *Op. Cit.*, opposite page 156.

	Bales of 400 Pounds.	Per Cent.
United States	8,520,000	55.92
East Indies.	3,280,000	21.33
China	1,450,000	9.52
Egypt	750,000	4.92
South America, West Indies, etc.	400,000	2.63
Africa, (except Egypt)	375,000	2.45
Asiatic Russia	200,000	1.31
Turkey	120,000	0.79
Japan	115,000	0.76
Greece, Italy, etc.	25,000	0.17
Total	15,235,000	100.00

Chief among the competitors of the United States as a cotton producing and exporting country, is India. Her cotton, the despised "Surat" of war times, when exported is chiefly used by the Continental countries,¹ as has already been mentioned. But in spite of the shortness of its staple, the Surat is no longer so despised by European spinners as was formerly the case. At the time of the American Civil War, the Indian cotton was not only short in staple, but poorly cleaned and poorly baled. Indian exporters have since learned the importance of handling well and preserving the staple which they ship. The Indian cotton is carefully wrapped in bagging, compressed until the cotton bale feels as hard as wood, and thoroughly protected by fourteen or fifteen turns of strap iron.² The care with which it is handled has often led to its being preferred to the otherwise better American staple, and our consul at Vienna reports that "Indian cotton is more and more gaining ground"

¹ "In the record season of 1889-90 when 3,361,000 bales of Indian cotton came into sight, Great Britain took just ten per cent., the Continent 45.6, Japan and the Far East 2.1,—in all 57.7 per cent. was exported; the mills consumed 30 and local consumption disposed of 12.3 per cent." Ellison, "The Cotton Trade of India," Latham, Alexander & Co.'s Report for 1895, p. 43.

² Report of John B. Hawes, U. S. Consul at Reichenberg, Bohemia, Report of Senate Committee, II : 86.

in Austria.¹ There is practically no limit to the area which can be devoted to cotton growing in India, and the United States consul-general at Calcutta tells us² that it is no longer the competition of the American cotton which regulates the cultivation of this staple in India. "The Indian cotton is not only finding a new and rapidly increasing market in India itself, but it also has taken a firm hold of the European Continental markets. . . . Cotton has entered into the regular rotation of crops among a people who dislike a change more than anything else, and being at all times readily convertible into money, is relied on by the farmer to produce a large portion of the cash required to meet the government rent and other payments." "As far more land is adapted to the cultivation of cotton than has ever been used for that purpose, one can feel assured that if the price of wheat or linseed falls, and of cotton rises, the change will lead to the claiming of a wider territory by the article advancing in value, than it has heretofore occupied." Perhaps India may come to consume nearly all of her cotton in her own mills, and thus relieve the United States from competition on the Continent, as she has already done in Great Britain.

A less imposing but really more dangerous rival to the American cotton trade is that of Egypt. This country, although having grown cotton in small amounts for centuries, became an exporter of it as late as 1821. It was the only one of the competitors of the South that succeeded in maintaining the increase in exportation which the American Civil War stimulated. The production and exportation of the Egyptian cotton have grown at a rapid rate ever since the Civil War, until in

¹ Report of Senate Committee, II : 92.

² *Ibid.*, 264.

1893, 678,000 bales were exported. About one-half of this went to the European mainland, and the rest mainly to England,¹ but a part of the English imports were re-shipped to other countries. A novel feature of this Egyptian cotton trade is the fact that a part of the exports are sent regularly to the United States, and are there consumed in the mills.² The imports of Egyptian cotton into the United States have been as follows :³

	Bales.		Bales.		Bales.
1884-85	4,553	1888-89	8,430	1892-93	42,475
1885-86	3,815	1889-90	10,470	1893-94	33,606
1886-87	4,700	1890-91	23,790	1894-95	59,418
1887-88	5,792	1891-92	27,739		

To a certain extent this cotton does not come into direct competition with American cotton. This is especially true of its use in the United States. "It is especially adapted for thread, fine yarns, fine underwear and hosiery (such as 'Balbriggan,' etc.), and for goods requiring smooth finish and high luster."⁴ For such goods the American cotton is not so well suited. But even in this country it has hurt somewhat the producer of long stapled cotton, because of its greater cheapness, and there has been a demand for tariff legislation against it.⁵ In Europe this cotton is highly prized, and its consumption has almost doubled in twenty years. About one-half the imports from Egypt are used in Great Britain. "The Egyptian cotton has become a serious

¹ Report of Senate Committee, II : 225.

² A considerable quantity of rough Peruvian cotton, amounting in 1895 to about 24,000 bales, also comes to this country, but as it is used exclusively in the woolen mills it does not enter into competition with American cotton. Shepperson, "Cotton Facts," (December, 1895,) p. 95.

³ Shepperson, "Cotton Facts," (December, 1895,) p. 95.

⁴ *Ibid.*

⁵ *Bradstreet's*, XXI : 459. The demand became quite urgent during the last session of Congress.

competitor to the American cotton," writes our consul at Horgen, Switzerland. "Its consumption has greatly increased. Numerous mills have discontinued to spin American cotton, and have arranged their mills for the spinning of Mako [Egyptian]." ¹ Without doubt a prominent reason for the preference given by many manufacturers to the Egyptian over the American cotton, is due to the better baling and ginning of the former. The saw gin which tears and otherwise injures the long silky staple of the better grades of cotton, is not used in Egypt. The Egyptian cotton, put into bales of about 750 pounds, gross weight, is carefully covered and protected, and the bales are compressed until they are even smaller in size than the American bales of only two-thirds the weight.

To the American cotton growers the most assuring feature in the competition of Egyptian cotton is that the area at present devoted to the cultivation of this cotton, (less than a million acres in the Nile delta) is too small, and the difficulties in the way of increasing it, owing to the expense of irrigation works, are too great to make the competition of Egypt a formidable one.² But the acting consul-general at Cairo, Mr. Louis B. Grant, tells us that "the means of irrigation are being improved year by year," and that "it is probable that in time there will be a considerable increase in the production of cotton, as it is one of the best paying crops."³ The wisest plan would seem to be for those engaged in preparing the American cotton for market, to prepare to meet this competition of Egyptian cotton rather than

¹ Report of Senate Committee, II : 134.

² Alfred B. Shepperson in Report of Senate Committee, I : 502-3; Edward Atkinson in *Manufacturers' Record*, XXVIII (October 25, 1895,) Supplement, page 2.

³ Report of Senate Committee, II : 223.

to rely on the supposition that Egypt is unable to overcome the obstacles to irrigation.

Next to India and Egypt, the country promising the most important rivalry to the southern states in the near future, is Asiatic Russia. Cotton from American upland seed has been grown in Turkestan only since 1884, but so rapid has been the increase in its production that in 1894, 120,000,000 pounds were produced in this country for the Russian mills. As is the case in Egypt, the amount of land which can be used for cotton growing is very small, and it seems to be the opinion of those learned in the matter that the extension of cotton culture under present methods will not be very rapid.¹ But Russia's anxiety to relieve herself from dependence upon other countries for a supply of cotton, may lead her to adopt such measures, or offer such encouragements, as will lead to a change from the present poor methods of cultivation east of the Caucasus, and enable this country to furnish a supply of cotton sufficient to meet her own demands.² There is, on the other hand, the prospect of cotton mills being erected in Central Asia itself, which will consume the cotton grown in that region.³ In that contingency it behooves the United States to make every possible effort to secure the trade of the mills in European Russia for her own cotton.

Among the other countries of the world which either are now producing or can grow cotton for export, there are some, like Argentina, Brazil and the region of Central Africa, which offer great possibilities for the distant future, but little more can now be said than this: The state of civilization, the sparsity of population and the

¹ Report of Senate Committee, I: 504; II: 168, 187, 192, 203.

² *Ibid.*, II: 167, 192, 203.

³ *Ibid.*, II: 168.

lack of facilities for transportation, prevent the present use of the great expanse of cotton lands in these countries, and will prevent it for years to come.

One of the principal causes which has led to a relative decline in the importation of American cotton by European spinners, as compared to that secured from other lands, is due to the better care with which these cottons of foreign growth are prepared for the market.¹ In the days of the invention of the saw gin, and the careful culture of the sea island cotton, it was largely due to the better condition of the American cotton that this staple displaced the cotton from India, the West Indies and Brazil, on the European markets. But the European traders in India and Egypt, who supervise the preparation for market of the cotton grown in those countries, have learned the lessons which the slow moving populations of the East were reluctant to learn. In America, on the other hand, confidence in the superiority of the home grown cotton, and America's monopoly of the foreign trade, seems to have led to carelessness in the handling of this staple on the part of producers and exporters. Improvements in the methods of ginning and baling that have readily been adopted in foreign countries have often been neglected here. "There is no important staple product of the world," says Mr. Edward Atkinson, "which is deteriorated so much after it has been successfully grown, as the cotton of this country. It is as a rule, when compared to any high or true standard of treatment, badly ginned, badly packed, worse baled and wastefully treated

¹ This subject has been exhaustively dealt with by Major Harry Hammond. See his article, "The Handling and Uses of Cotton," in "The Cotton Plant," Bulletin No 33, Office of Experiment Stations, Dept. of Agriculture, (1896).

from the time it leaves the hands of the picker until it reaches the warehouse of the mill in which it is to be spun.”¹

The attention of the American people has often been called to this injurious method of ginning and packing, not only by our own manufacturers who are directly interested in the matter, but by our consuls in Europe, who have an opportunity to compare the condition of the American bales arriving there with the bales from other lands. In 1887, Mr. John B. Hawes, the United States consul at Reichenberg, Bohemia, in his dispatches wrote as follows:² “It is estimated that 60 per cent. of the cotton imported is American. American cotton is recognized to be the best, but there is one serious objection to it, the remedying of which is in the hands of the American packer, that is, careless packing. I have recently been shown a warehouse filled with hundreds of bales of cotton. In one end was the Indian cotton, and in the other the American. The Indian cotton was in bales little more than half the size of American, and yet weighing within a few pounds as much.³ Each bale was encircled with a continuous piece of strap iron, making fourteen or fifteen turns. The cotton was wrapped in coarse sacking, which the iron had thoroughly protected. An examination of the end of the bale showed the cotton so firmly pressed that it was as hard as wood.

“The American cotton was wrapped also in bagging, and each bale was encircled by not more than half a dozen iron straps. Nearly every bale had burst open,

¹ Quoted from *Manufacturers' Record* by *Bradstreet's*, XXI : 459.

² Reprinted in Report of Senate Committee, II : 89-90.

³ This is an error. Average net weight of American bales in 1887-88, was 475 pounds ; Indian bales, 395 pounds.

and larger or smaller quantities of cotton were protruding, and of course more or less had been lost in shipment. If the American bales were compressed to nearly half their present size and more strongly packed, I am sure it would affect favorably the sales of the American cotton here and elsewhere, and American cotton growers cannot afford to neglect any means of this kind if they would compete with their Indian rivals."

"I had hopes at the time of making these reports," writes the consul in 1893, "that an improvement might take place, especially as the department seemed to interest itself in the matter, but I regret to say that American cotton arrives here to-day in just the same condition as in 1887."

The statements of Mr. Hawes are corroborated by the evidence of Hugo M. Starkloff, U. S. Consul at Bremen, Germany, who writes:¹

"For a long time the imperfect packing of the American cotton has been the subject of much complaint, made by all parties concerned, without any successful measures having hitherto been adopted in order to lead to an improvement. . . . By the use of the present bagging with its wide meshes, the importers suffer many inconveniences, and even considerable losses. It frequently occurs that the bales arrive here in such a defective condition as to be beyond description. Of the original packing or covers, only some rags are to be discovered, and it may easily be explained that bales of cotton in such condition create a considerable danger of fire, so that the underwriters evince great scruples to insure cotton. . . . Competent authorities in America might contribute to bring this [a strengthen-

¹ Report of Senate Committee, II : 78-9.

ing of the direct intercourse between Germany and the United States] about by taking energetic steps in order to put an end to the abuses aforesaid, and by exerting themselves to introduce better packing or covers of the bales of cotton, meeting all requirements as to closeness and durability, and adapted sufficiently to protect the cotton from thieves, damage, and risk of fire—a packing similar to that of East Indian cotton, which has never yet given rise to complaints.”¹

Within a year or two a new system of baling and compressing cotton, by means of which the cotton is put up in cylindrical bales, has come into use, in some sections of the Southwest. It is claimed by the friends of the new system that the bales are better packed and protected than when the cotton is put up in square bales, and there is undoubtedly a saving in transportation and storage, as seventy to eighty of these cylindrical bales can be placed in a car that could carry only from twenty to forty of the square packages.² One hundred of these cylindrical bales, averaging 32.7 pounds per cubic foot, have recently been shipped in one car,³ and some of the railroads have offered rebates for cotton baled in this way when shipped by their roads. It is also claimed that the fibre, which it is asserted is damaged by the high pressure of the Indian and Egyptian compresses, is left uninjured in the cylindrical bales. The leading objection to the new system, known as the Bessonette system, is that it does not permit of sampling the cotton when it is once put in the bales, although its advocates

¹ See cuts in “The Cotton Plant” pp. 361, 363, showing American, Egyptian, Indian and Turkish bales, and the Bessonette cylindrical bales, as they arrive on the European markets.

² Jerome Hill, “Preparing Cotton for Shipment,” *Manufacturers’ Record*, Nov. 1, 1895, Supplement, 2-3.

³ *Manufacturers’ Record*, XXVIII: 207.

claim that the method which is at present adopted of taking samples during the process of baling, "one when the bat has commenced to roll on mandrel, one when the bale is half made and one just before it is completed," together with the twelve months' guarantee to the manufacturer, that the cotton is equal to the samples, is superior to the old method of free samples. If these claims prove well founded, there can be little doubt that the favor which will be shown the cylindrical bales by manufacturers and by railway and steamship lines will soon lead to the adoption of the new system throughout the South.

Recent experiments and the experience of other countries seem to indicate that the saw gin which a century ago gave the world's cotton trade into the hands of the people of the South, will itself have to give way to new appliances for cleaning the fleecy staple, and that the roller gin, long since superseded, except in the case of the sea island cotton, may, greatly improved, again come into use for cleaning the better grades of the upland varieties as well.¹ The future of the cotton trade is in the hands of American producers, packers and shippers, for there is little doubt but that European manufacturers still prefer the American cotton when it is handled and shipped with the same care as the staple produced in other lands.

Important as is the foreign trade to the cotton growers of America, it is to be hoped that the greatest expansion of the cotton market will henceforth come from an increase in the home consumption. Not only is our

¹ See papers read at the Cotton Manufacturers' Association at the Atlanta Exposition, October, 1895, by Edward Atkinson on "Improvement of Cotton," and by Jerome Hill on "Preparing Cotton for Shipment," reported in *Manufacturers' Record*, Vol. XXVIII, (October 25, and Nov. 1, 1895).

own rapidly growing population offering a constant stimulus to cotton manufacturers, but the opening of new markets in China, Japan,¹ and especially in the Central and South American republics, present opportunities which our manufacturers and merchants should avail themselves of to supply the people of these lands with American made cotton goods. Our protective system, it is sometimes said, prevents us from competing with English and Indian cotton manufacturers in the outside markets of the world.² This is a subject which will command our attention in the subsequent portion of this work. It is sufficient here to point out that the future development of the American cotton trade depends largely on the ability of American manufacturers to find wider markets for their fabricated products.

¹ "Cotton is being transported in large quantities by rail from the South to San Francisco for ocean reshipment from that point to China and Japan. This is a new departure in commerce, and one which promises to be very advantageous to our cotton producers in the way of extending their market and giving them better prices." *St. Louis Globe-Democrat*, December 26, 1896.

² Ellison, "A Centennial Sketch," 26.

APPENDIX I.

STATISTICS OF THE COTTON PRODUCTION AND TRADE OF THE UNITED STATES.

NOTE TO TABLE.

For the early years of the American cotton trade the statistics are not to be relied upon for accuracy, as they are usually mere estimates made by merchants or government officials. Not until 1821 do we have accurate statistics of production. In order to illustrate the growth of the American cotton trade, I have, nevertheless, included the figures for the earlier years wherever they seemed to rest on good authority, or to be the result of a careful estimate. The sources of information for the following table are Woodbury's Report on Cotton Production and Consumption (Ex. Doc., 1st Sess., 14th Cong., No. 146); James L. Watkin's "Production and Price of Cotton for One Hundred Years" (published by the U. S. Dept. of Agriculture); "Cotton in Commerce" (published by the Bureau of Statistics, U. S. Treasury Dept.); Ellison's "The Cotton Trade of Great Britain;" the "Annual Reviews" of Ellison & Co., Liverpool; Donnell's "History of Cotton; *The Commercial and Financial Chronicle*; The Statistical Abstract of the United States (published by the Bureau of Statistics, U. S. Treasury Dept.), and the Annual Reports of Henry G. Hester, secretary of the New Orleans Cotton Exchange.

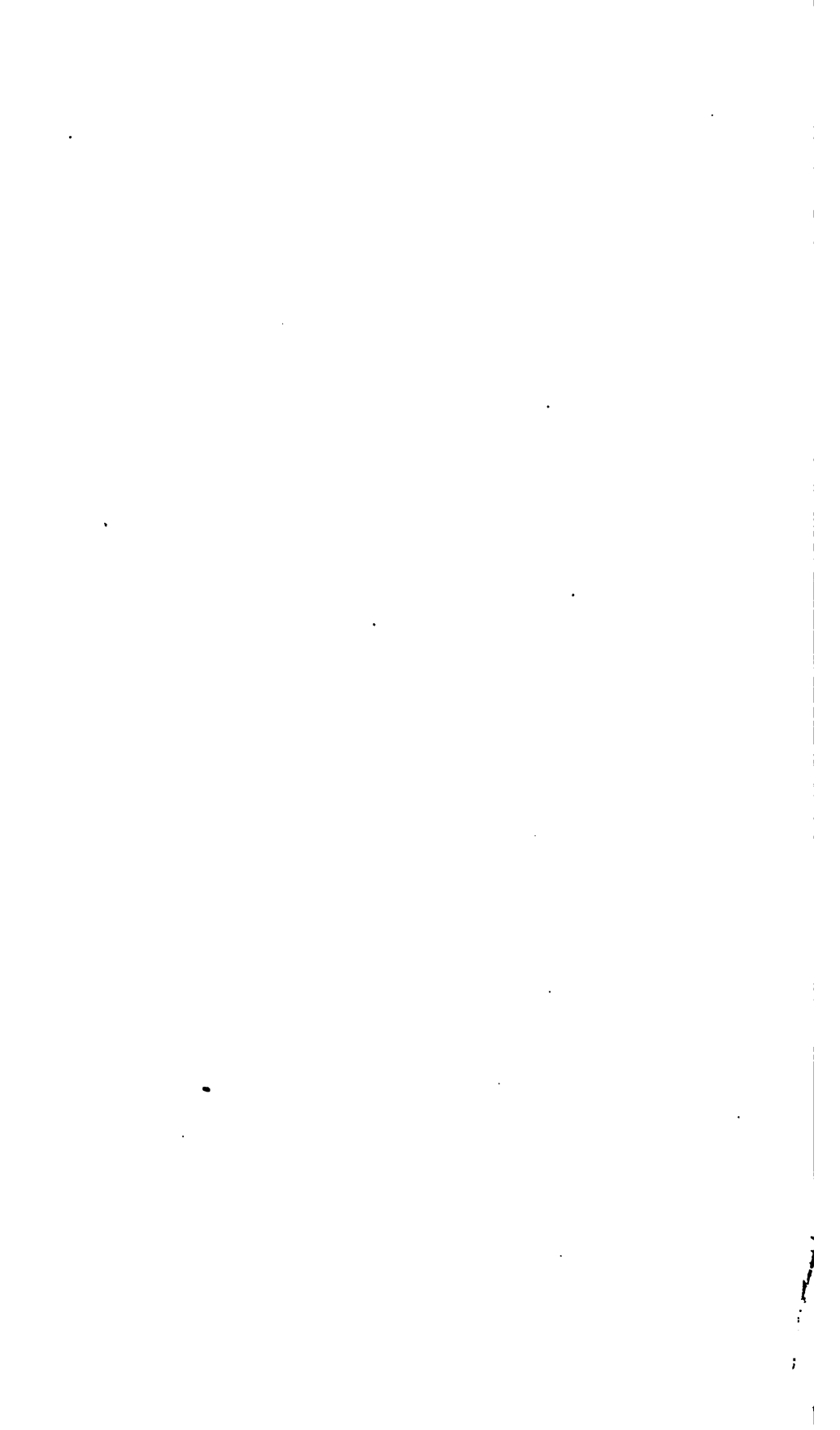
Mr. Hester has called my attention to the fact that the average annual prices at New Orleans, the largest "spot" market on this side of the Atlantic, would furnish a much better basis for a comparison of American and British prices than those at New York, where the annual sales are comparatively insignificant. Unfortunately the average annual prices at New Orleans do not seem ever to have been collated. *The New Orleans Price Current* would probably furnish the data, but the files of this journal were not at hand when I compiled my table.

In the following table some of the earlier years end September 30th, instead of August 31st. The early years also include in the exports some cotton of foreign growth reshipped from the United States. The classification of cotton has been changed several times by the New York Cotton Exchange. For this reason "middling uplands" do not always represent exactly the same grade. The change is believed, however, to be unimportant, and doubtless does not affect seriously the variation of prices.



The Cotton Production and Trade of the United States from 1784 to 1897.

	Total Production of		Total Exports of		Total Exports of United States to Great Britain		Total Consumption of		Average	
	No data	No data	No data	No data	No data	No data	United States	No data	New York	Liverpool
1862	No data	No data	No data	No data	No data	No data	318	No data	13.01	8.30
1863	"	"	"	"	"	"	388	"	31.29	18.37
1864	"	"	"	"	"	"	420	"	67.21	22.46
1865	"	"	"	"	"	"	245	"	101.50	27.17
1866	2,669	10,196.2	1555	6,905.73	1,262	512,464	17,499	62.43	83.38	19.11
1867	2,097	9,691.75	1,557	6,614.73	1,216	524,320	13,376	43.20	31.59	10.98
1868	2,520	11,734.31	1,656	7,847.54	1,220	564,815	10,490	66.90	24.85	10.52
1869	2,366	11,208.12	1,466	6,443.38	990	398,168	770	57.61	23.98	8.55
1870	3,123	14,514.01	2,006	9,985.59	1,475	426,547	976	72.39	16.95	10.78
1871	4,352	20,206.94	3,166	14,620.28	2,167	609,166	865	67.44	18.15	8.30
1872	3,931	18,313.89	2,680	13,353.37	1,455	703,915	1,110	63.71	17.00	8.30
1873	4,170	19,066.48	2,841	15,860.02	1,906	838,649	1,201	78.25	15.00	8.30
1874	38.33	176,364.4	2,685	1,601,405	1,804	902,872	1,306	70.75	13.00	6.01
1875	46.32	215,795.58	3,234	1,691,405	2,025	957,330	1,352	68.75	11.78	6.31
1876	4,474	20,590.01	3,931	14,453.69	2,037	10,203.64	1,428	65.20	10.63	8.90
1877	4,774	22,602.86	3,360	16,675.34	2,037	10,399.48	1,489	71.21	11.34	6.16
1878	5,074	24,044.10	3,481	18,226.61	2,536	11,766.29	1,700	67.74	10.38	6.94
1879	5,761	27,717.97	3,885	21,919.29	2,536	13,648.26	1,939	65.71	11.34	6.16
1880	6,666	31,968.23	4,580	27,399.76	2,843	15,688.26	2,163	67.23	10.63	8.90
1881	5,456	25,832.40	3,583	27,399.76	2,312	11,808.96	1,965	67.23	10.63	8.90
1882	6,950	34,050.70	4,767	22,880.75	2,888	13,882.05	1,973	67.23	10.63	8.90
1883	5,713	27,575.44	3,917	18,625.73	2,499	11,921.27	1,877	67.23	10.63	8.90
1884	5,761	27,717.97	3,948	18,625.73	2,499	11,921.27	1,877	67.23	10.63	8.90
1885	5,766	27,820.66	3,948	18,625.73	2,499	11,921.27	1,877	67.23	10.63	8.90
1886	6,576	31,823.06	4,336	20,580.37	2,559	12,222.41	1,753	68.06	10.54	8.79
1887	6,595	31,573.78	4,445	20,580.37	2,559	12,222.41	1,753	68.06	10.54	8.79
1888	7,046	34,393.72	4,628	21,694.57	2,608	13,567.57	1,753	68.06	10.54	8.79
1889	6,938	34,393.72	4,445	21,694.57	2,608	13,567.57	1,753	68.06	10.54	8.79
1890	7,311	36,273.66	4,950	23,848.17	2,842	14,704.00	2,112	68.71	10.25	8.44
1891	8,653	43,160.44	5,847	28,818.7	2,845	14,704.00	2,112	68.71	10.25	8.44
1892	9,935	45,065.76	5,913	29,352.20	2,845	14,704.00	2,112	68.71	10.25	8.44
1893	6,700	33,526.58	4,445	20,580.37	2,608	13,567.57	1,753	68.06	10.54	8.79
1894	7,550	37,693.81	5,288	22,121.15	2,332	11,815.88	2,431	65.13	9.64	4.18
1895	9,901	50,596.95	6,818	26,812.82	2,761	14,854.51	2,330	65.13	7.67	4.21
1896	7,157	35,924.17	4,707	33,050.46	3,325	16,094.99	2,947	65.61	6.50	3.41
1897	8,757	43,971.78	6,052	32,623.57	3,018	15,155.99	2,847	65.61	8.16	4.12
				30,385.88	3,018	15,155.99	2,847	69.12	7.72	



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APPENDIX II.

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ERRATA ET CORRIGENDA.

On page 18, note³, and subsequent references to this author, for "Uré," read "Ure."

On page 50, in line 3, for "cropping," read "single crop."

On page 61, in line 11, for "large or larger," read "large as or larger."

On page 122, in line 13, for "establishing," read "re-establishing."

On page 175, in the table, omit the averages in the columns headed "Annual Rate of Increase or Decrease, Per cent."

On page 206, in line 32, for "socities," read "societies," and in line 33 for "about two dollars," read "about four dollars."

On page 282, in line 1, for 1810, read 1830.

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